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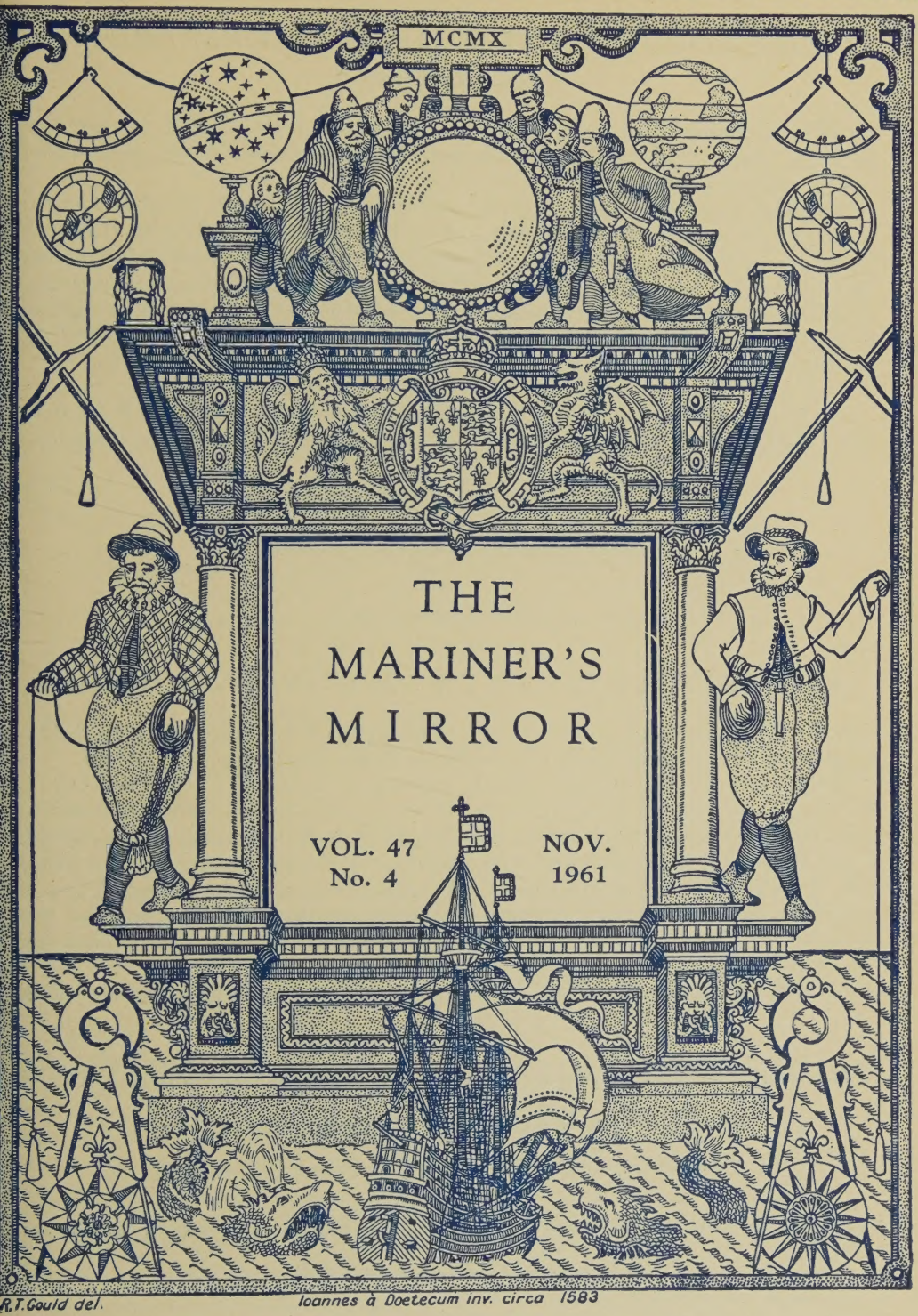

THE MARINER'S MIRROR

VOL. 47 NOV.
No. 4 1961

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The aim of the Society being to arrive at true conclusions through free discussion, it is distinctly to be understood that the Editor is not held responsible for statements made in the *Journal*.

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Names of ships should be underlined to denote *italics*, and not written within inverted commas.

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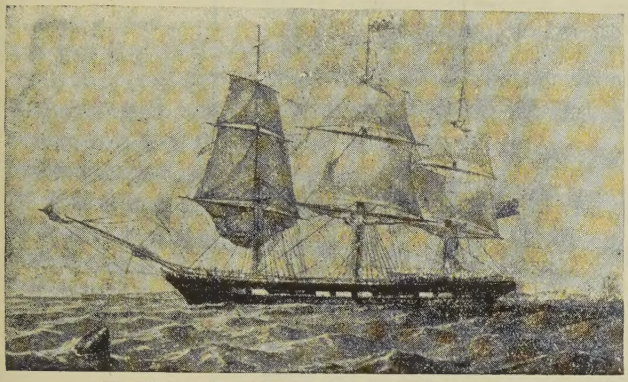

The Blackwaller *Windsor Castle* leaving Bombay 1859

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after the manner of their

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Nations

VOL. 47. NO. 4 1961

OBITUARY

THE LATE CAPTAIN EMANUEL, ROYAL MARINES

MANY of the elder members of our Society will have learnt with great regret of the death of Captain T. Emanuel which occurred on 29 December 1960, at the age of 77. He was in charge of the library of the National Maritime Museum for periods before and after the war, and his intimate knowledge of the books and other matter therein was readily available to enquirers and students, and made the more acceptable owing to his invariable geniality and patience. He attained to a considerable acquaintance with the portulans, atlases and other treasures in the library, and, in the embryo stages of the Museum, had assisted with the Macpherson Collection and with acquisition records.

Thomas Emanuel enlisted in the Royal Marine Artillery in 1900 and served for five years in the garrison of St Helena, rising to the rank of sergeant there in 1913. He was promoted to Royal Marine Gunner in 1917, and at the end of the 1914–18 War was in H.M.S. *Orion* in the Grand Fleet. Subsequent to retirement in 1920 he joined the Royal Marine Police and was stationed at the Royal Naval College, Greenwich, as sergeant in 1924. As a result of his connexion with that establishment and having reverted to pension, he was transferred in September 1925 for service in the Cashier's Office and as assistant in the College library. It was then that he came under the patronage of Professor Callender who quickly appreciated his ability and aptitude, and was instrumental in Emanuel's being created clerical

officer in the newly constituted National Maritime Museum on 30 September 1934, and junior assistant in 1936. He was in this position when the Museum was opened in 1937, and until the outbreak of war caused all its collections to be dispersed to places of safety. Emanuel was eager to serve again in his old Corps and had the gratification to be called up in the acting rank of lieutenant in March 1940. A few months later, now in the rank of captain, he joined the staff of D.E.M.S. in the Liver Building, Liverpool, performing useful service in that appointment for the rest of the war. On 1 November 1947 he resumed duty at the Museum as temporary library assistant pending the arrival of a permanent librarian, and remained until July 1949, when he finally retired with honour and the satisfaction of labours efficiently carried to fruition.

SAILING WITH THE ARABS

By Alan Villiers

HAVING recently, with regret, sold my full-rigged ship *Joseph Conrad* in U.S.A. because of the almost total lack of interest in any such project not only here in Britain but also in my native Australia, I decided to go to the Indian Ocean and sail with the Arabs in their dhows. I was ambitious enough to work out a sort of five-year plan to sail in these waters and farther East, my idea being to study thoroughly and at first-hand just how such vessels were handled and built and sailed. I intended to begin in Arabia, move on to India and thence to Malaya and the East Indies generally, and fetch up in the China Sea.

As far as I could find out, it was some time since a European had really tried to sail much in dhows, junks, praus, and so forth, taking them as he found them. Indeed, the most recent chronicler of such voyages appeared to be Marco Polo. Whatever else he may have been, I do not think he was a sailor. Modern scholars had written of these ships but I could not find any who had sailed in them, nor wanted to do any such thing. Admiral Sir William Goodenough, the President of the Royal Geographical Society (for whom I had recently shown a sailing ship film), was my best source of information and practical help. He passed me on to Mr W. H. Ingrams, C.M.G., O.B.E., then British Resident Adviser at Mukalla in the Hadhramaut, who had sailed in a dhow from Mukalla to Socotra and knew something about these vessels. The Sheikh Hafiz Wahba, then the representative in Britain for King Ibn Saud of Saud Arabia (and later Ambassador for

Fig. 1. Sambuks hauled up for overhaul at Gizan.

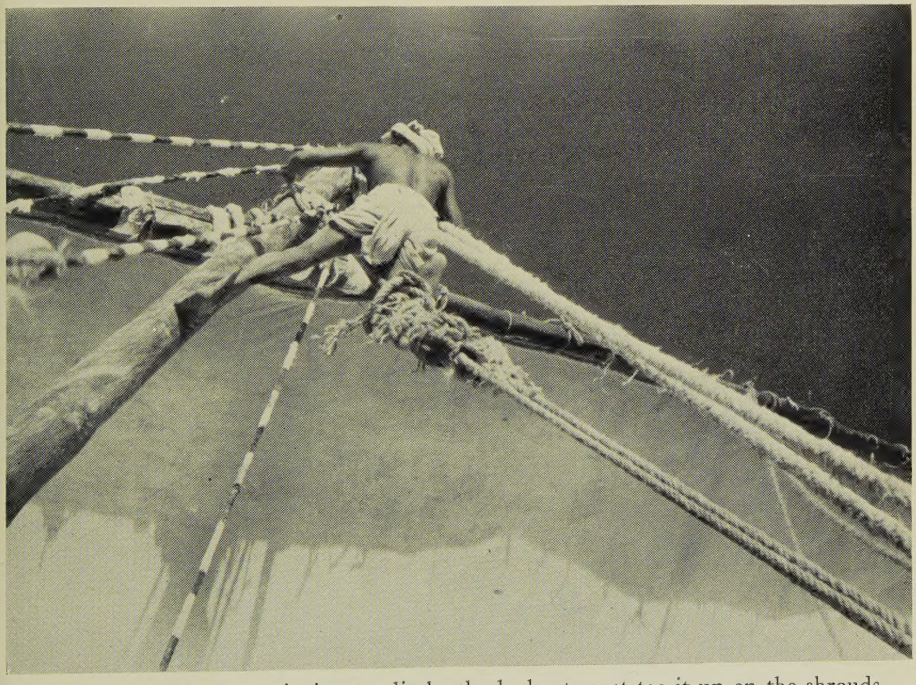

Fig. 2. There was no rigging to climb: the lookout must toe it up on the shrouds.

(*Facing p.* 242)

Fig. 3. Forecastle of the *Sheikh Mausur*, with members of the crew preparing a meal. Note matting bulwarks laced up on a sort of post-and-rail fence, barrel-like firebox, open hold.

Fig. 4. Red sea traders hauled out at Gizan-Zaruqs and small sambuks. Gear from the grounded vessels is piled on the foreshore.

Saud Arabia at the Court of St James) scribbled a few things in Arabic in my passport and wished me well, though he appeared to be rather astonished at the idea of my mission. So I went on to Aden by steamer from Marseilles, industriously studying *The Spoken Arabic of Iraq*, by John Van Ess, M.A., on the way. At Aden the Governor, Sir Bernard Reilly, K.C.M.G. passed me on to Captain Tom Hickinbotham (later Sir Tom, and a Governor of Aden himself from 1951 to 1956). Through Sir Tom Hickinbotham I met the Aden members of the powerful al-Hamad family of Kuwait, Ali Abdul-latif al-Hamad. At last I could begin my practical work, for the al-Hamads were dhow owners and charterers. They had interests in Kuwait *booms*, the big fellows which sailed the monsoonal waters of the Indian Ocean, and they chartered *sambuks* and the like for the distributive trade out of Aden across to Berbera and Djibouti, and into the Red Sea.

I mention some details of this round-about approach, for it is not a simple matter to go to Arabia and sail in dhows. My organization took some time. Through the kindness of Ingrams and Hickinbotham, the Sheikh Hafiz Wahba and the al-Hamads, I was not to touch at a port in Arabia however remote without some sort of scribbled note to the senior local sheikh or emir or sultan, whoever he was. Even so, chancing to arrive at Gizan once when the Emir was asleep and no one would dare waken him, I landed temporarily in jail, and the Sultan of Shihr was so concerned for my well-being and personal safety while in his territory that he kept me in a state of incarceration in his very large and well-guarded palace, during the time my *boom* was anchored in his waters. He was a nice man with red whiskers who took no chances.

I sailed first in an al-Hamad chartered Red Sea vessel, the Yemenite 'zaruq', *Sheikh Mansur*, from Aden to Gizan, in Asir. In this vessel I had as companion a young seaman from the *Joseph Conrad* who proposed to take up archaeology as a career, and planned an inland excursion from Gizan. My journal was written up afterwards, for the little zaruq proved so tough and rough that it was possible only to keep notes aboard, and the fasting month of Ramadhan was no help.

I quote from the journal.

We duly boarded the *Sheikh Mansur* (I learned that the proper descriptive name of her double-ended Red Sea type is Zaruq or Zarook) at 4 o'clock on November 8, 1938 coming aboard simultaneously with an elderly Indian under escort of police. It seemed that he was a holy man from Karachi bound on the pilgrimage. The holiness was taken for granted, for he had no other occupation, and the police escort was explained by the fact that he had neglected to bring any cash. He had come to Aden in an Omani

baggla from somewhere in the Persian Gulf, whither he had first made his way in a Bombay kotia which had gone there from Porbandar. Perhaps I wrong the old man, but I had a suspicion that his principal occupation might be begging: and I did notice that he alone of the *Sheikh Mansur*'s crowd (apart from the heathen mate) offered no prayers. He was a big man, bare-headed, with his hair and his bushy beard shot through with natural grey and artificial red: he wore amber beads always, and had a spare bead lashed in a hole in the lobe of his left ear. On his left wrist was lashed a piece of glass, cut like a crystal and held on with string. He wore a coat like Joseph's, and his luggage was a kerosene tin, hinged and stapled and apparently plentifully filled with food, and a pointed staff. He had also a small blanket of as many patterns and colours as his coat: the dominant note in both was red.

This gentleman, under the watchful eye of a barefoot constable who shook our hands by the palms and thumbs most ceremoniously, established himself at once on some sacks of flour 'midships as if accustomed to this mode of travel, and the little vessel, under a rag of a jib—it was really the hoisted clew of a lateen main, sent aloft on the hauling part of a shroud tackle—moved from her moorings to single anchor by a Kuwait *boom*, a couple of cables away. Here, having boarded the *boom* armed with an order from the Sheikh Abdul-Latif and returned with a dozen packets of Basra dates (for which later we thanked God), she stayed the night, while in the early moon the sailors sat about the tiny poop admiring the treasures they had bought in Ma'alla—cheap Japanese sarongs, and lengths of cloth of divers colours, a turban or two. The contemplation of these objects seemed to give them great delight. The evening meal, which ought to have been a warning of what was to come, consisted of some exceedingly bad unleavened bread, plentifully mixed with ashes, and some dreadful sort of paste which I could not swallow. But we had brought some oranges, and raisins, and biscuits and sardines—very little, but at any rate we fared well enough while these lasted.

Towards four in the morning the *Sheikh Mansur* sailed, with a light fair wind out of the harbour and apparently also the outgoing tide to help her. The mainsail had been bent at the anchorage and the yard hoisted with the sail fast in palm-frond stops. When she sailed they merely lifted the anchor by hand, and sheeted home the sail which instantly broke out of its stops. The Nakhoda took the tiller and she was under way, slipping along unlit and very silently under the mainsail alone. This indeed was the only sail she ever set, or had, for though she was fitted with a short mizzen mast there was neither yard nor rigging for this, and except to get a round turn of the main-sheet, it was never used. The mizzen mast was bare and grey, for it had

never been oiled: it was provided only with the two sheaves by the masthead for the double tie of Arab halliards. Sunrise next morning found us becalmed and rolling uncomfortably outside Aden harbour. She was deepladen and abominably stiff, rolling with a sudden jerky motion: I was pleased not to be sick. The Nakhoda, I should have said, had given me (against my will) his corded bed to sleep on, while he rigged the mate's and slept on that. (Later he also gave up that, to Hilgard.) The cords of the bed were tough and sleep uncomfortable in the best of circumstances, and I regretted to notice at once how cold it was at night. I had brought no blankets and there were none on board.

Later a faint air came up from a little south of east, and with eased sheets we ghosted along South Arabia's arid shore, towards Bab-el-Mandeb. It was very hot in the sun and there was no shelter nor, indeed, did anyone seem to feel the need for any save us. We anchored very late that night, after a long hot hungry day, in a small cove under Perim, in company with a sambuk bound towards Kamaran. This was not a bad day's progress.

We were off before dawn again, the other vessel sailing first and coming into collision very mildly with us while getting under way with the clew of a lateen hoisted as a jib. She bumped into our sanitary department, a box lashed on the port quarter, but did even this no harm. After that we were off ourselves, and sailed all day with a good south wind bound towards the passage inside the reef to Gizan. I noticed very early that the crew had to bail an awful lot. The *Sheikh Mansur* made a lot of water, and the only arrangement for getting rid of this was by means of a kerosene tin used in the rough well abaft the mainmast. Into this foul-smelling cavern between the cargo (which was lightly protected by date-frond mats) a man or a boy would descend each hour, while another squatting on the deck above lowered the tin to him, on a lanyard, and hauled it up again and emptied it into a trough leading over the side, as it was filled. They got ten or twelve buckets an hour, which was more than enough. She was only an open boat, very deeploaded, but the weather was good and the date-matting bulwarks along the sides was surprisingly efficient. Almost no water came in over the side, in spite of the fact that her free-board 'midships could not much have exceeded six inches.

Off Mocha this day, the second day out, we saw a handsome *sambuk* which had lost its rudder and, barging about all over the place, was sailing along under only a headsail. Her people did not seem to be attempting any repairs but said they were all right when we came close and offered assistance. Mosquitoes were pretty bad that night, for we were close to the shore, and later there was a heavy dew which did not add to anyone's comfort. The

Yemen coastline looks interesting and in parts even fruitful, but though we anchored near the beach several nights we did not land.

I was very interested to learn all I could of the way in which the ship was run, for she was something entirely new to my experience. The most primitive thing I knew, before this, had been a Tasmanian timber ketch which God knows was bad enough. But the *Sheikh Mansur*, compared with that ketch, was about as lavishly equipped as a South Sea canoe and as well-found as an Irish fisherman. Without any kind of windlass (and no anchor save two rusty small grapnels), with no boat other than a small dugout canoe which could support five expert balancers in a mill-pond, with no instruments of any kind save one ancient and very inefficient compass, without even a leadline to sound (sometimes the Nakhoda used part of a fishing-line weighted with a stone), without shelter for anyone nor a deck above the cargo nor over anyone's head, without charts, without a log, without even a pump, with nothing to cook in save a firebox and a native oven and precious little to put in either, with no one on board who could write and only one who could read, leaky, overloaded, heavily-canvassed—still that little ship wandered pleasantly enough along, delivering her cargoes in good condition at the tiny outposts of one of the worst seas in the world, full of reefs and sets and maritime dangers which still, upon occasion, prove the undoing of great steamers. She had been doing that for years. There was not even a flag on board, and no clock; no one had heard of barometers. There was nowhere to sleep save on the cargo, apart from the two rough 'beds' on the tiny poop which ordinarily were used by the Nakhoda and his mate. There was not a spare ropeyard on board, and the sea stores for eleven souls for a week were kept in one small box, from which of course they mighty soon disappeared. One of the main sources of food supply was a fishing-line trailing astern. No watches were kept, and there was no semblance of sea 'style'—no wheel turns, no set meal hours, no turns at anything. All hands were there all the time and all hands turned out for everything, except bailing. As for steering the mate or one of the sailors took the tiller when he felt like it and there he stayed until it occurred to someone else to relieve him. 'Tricks' of five and six hours and even all day were not at all unknown. The food was complicated by the regrettable fact that this was the month of Ramadhan, and though there is a general dispensation for sailors and travellers from the great fast, no one took advantage of this (except the heathen mate) and no one ate or drank from sunrise to sunset. This was unfortunate and also uncomfortable. For several days, we existed on a handful of dates: we became constipated: we were bitten by mosquitoes, flies, bugs of all kinds: great beetles and cockroaches scampered over us. Yet we felt surprising well, and this once in spite of being constipated for

five days. The sanitary arrangements consisted of an old box lashed on the quarter, a small box in which one was supposed to squat and operate through a hole in the bottom. Toilet paper was a small tin in which one hauled up tinfuls of the sea, the Moslems using the left hand to wash the anus and never using anything as unclean as paper. This method though tough at first indeed proved quite good, after a while, but the damned box was too small to squat in and altogether I was very pleased when we landed for the first time, five days out, on a small cay north of Kamaran.

We anchored each night and sailed only by day, which was understandable in those waters. Navigation was by sight: the Nakhoda knew his waters. Sometimes on hazy days he would send someone aloft to pick out landmarks: once or twice he sounded, and saw there was precious little water when he did. He never took bearings: he never fixed his ship's position: he prayed to Allah, cleaned and facing Mecca five times daily (like everybody else on board, except the heathen mate); he kept his eyes open, he knew his ship and his life had been spent in the Red Sea trade. The Red Sea, from Yenbo as far as Djibouti and Berbera (if they are in the Red Sea) was to him as familiar as a well-lit street on a citizen's homeward journey: and he knew the South Arabian coast as far around as Sur in Oman. He was a slight thin man named Ahmed—Ahmed Mansur—and he had been at sea since he was eight. He had known no schooling and could not read. His black hair he wore close-cropped, and his beard was small and well trimmed. His features were good and surprisingly gentle: he had a way of looking from his limpid brown eyes underneath his brows which was most attractive: his disposition was good and he appeared to be the friend of all his crew. He was always dressed in the same manner, usually in the same clothes—a brief sarong, chequered in blue and white and coming only to the knees, a golden black-striped waistcoat, in the commodious pockets of which were the manifest and all the ship's papers and all the letters he had ever received: beneath this he wore a Japanese singlet, copiously ventilated, and his money-belt was covered with a multi-coloured sash about the waist, lashed tightly. He wore a small cap in white crochet, far back on his small head, and wrapped round this was a golden turban. He was always barefoot. Ashore he carried his rosary of amber beads, in his right hand, and he usually had a small cane. Ashore, too, in the manner of Nakhodas of the Red Sea, he often had his gold turban over his shoulder and only the crocheted cap on his head. Aghals, long gowns, the mushla—all these Arab appurtenances of Hejaz and of Nejd were unknown to him. Ahmed saw a Yemenite, from Lohaiya (this can be spelt, like most Arabic proper nouns, in any way you choose) and he dressed as such. For that matter, I never saw a Red Sea Nakhoda in either gown or aghal. Ahmed had ordinarily a quiet manner

and a soft gentle voice, and his face knew more peace than some bishops': but at times he would yell excitedly in sudden jerky sentences—manœuvering the ship, for instance, or if the sail was torn. He was a simple man with a simple outlook: Allah and his ship seemed to fill his life to his complete satisfaction, though he told me he had a wife and three small children at Lohaiya. His eldest son, an upstanding lad of 15, was along with him as sailor in the *Sheikh Mansur*. The lad had the keeping of the keys, and when at last Gizan was in sight, handed clean clothes up to his father from some mysterious recess beneath the poop. He was a cheerful chap with a great scar across the small of his back from some heavy wound not yet all healed, and he carried the ship's keys on a chain fast in a money-belt round his waist. He swam very well, and was a good sailor.

The crew, apart from the Nakhoda, consisted of three men and four boys—eight hands all told, which ought to be enough for any fifty-footer, even such a work-producer as an Arab dhow. The men were an ancient Turk, at least 70, who surveyed the world through bleary eyes and, huddled in his ancient coat, puffed every night at some foul tobacco in a home-made hookah of his own invention. This was his only luxury and indeed his only comfort. His possessions were a few rags and a handful of dates, kept in a little wicker basket in his place among the cargo, and a very decrepit calico bag in which he kept his tobacco. He wore always, day and night, an old grey coat which had obviously been made for someone else, a very dirty fez and a torn sarong: and he looked rather pessimistic. But he seemed a good old chap, and he still could play with the boys. The two other men were the mate, a small tough Yemenite with a pointed beard and a great thirst for coffee made with ginger (horrid stuff), and a stalwart negro ex-slave who was the best-built man and in many ways the finest seamen on board. He knew neither how old he was nor where he came from, but he thought it was somewhere in the Sudan. He was free now, and had long earned his living in *sambuks*: he was also married at Lohaiya, and was as devout a Moslem as any. He had a good face, and I liked him. He did his work quietly and well and was always cheerful. The youngest of the boys cooked, and a wretched job he had: the second youngest seemed to be the ship's idiot. The boy who cooked led a miserable life. There were not even any matches: it was his duty to keep some embers not quite dead—one could hardly call them alive—and sometimes he spent hours fanning these to get his small wood fire. He could make a fire from incredibly little, and a meal out of less. But indeed we fared very badly, quite apart from Ramadhan. The thick coarse grey ashen bread which the boy produced was extraordinarily distasteful, and apart from this (when there were no fish) the only other dish was a kind of gelatinous, pinkish paste. This I could not eat: I ate a date.

At first there was some rice but this soon went: so also did the tea, which had been palatable. The method of cooking fish was to clean them, liberally sprinkle them with coarse salt, and put them in the hot ashes of the oven fire. Above them the 'khubz' was always placed, but this was usually so bad that even the taste of fish was not evident in it. The fish roasted in this way were very good, and indeed the only palatable food we got. Later flour gave out, and odds and ends had to be scraped up out of old goatskins rescued from the dim cockroach-ridden darkness beneath the poop. The fresh water was in an iron drum, exposed to the elements and the whole day's sun: though it was Aden water (which is good) it soon began to breed small twisting animals, and I would not dare drink it by night. Fishing was usually left to the simple device of a single line trailing over the stern, and though there were days when this was effective (for the Red Sea teems with fish) there were others when it was not. Sometimes the bearded mate would pass a turn of the fishing-line about his big toe, and turn in to sleep in the canoe. His sleep was disturbed only once, by a big fish of the bonita family, which provided an excellent meal for all hands.

No one had any blankets nor any really warm clothes. No one had a sea chest, nor a place to keep anything. (The entire possessions of all hands, including the old Turk's hookah, would fit in the half of any ordinary chest). Rags were at a premium, and both ship and crew were very, very poor. But never having known any other conditions they did not mind, and both ship and people wandered pleasantly enough along neither seeking the unattainable, both well content with things as they are. I thought the ship might permit less of the sea to seep through her seams: otherwise she was all right. Comfort is unknown here: no one minds the smell of bilge-water, foul as it is: no one minds drinking water which is warm, brackish and full of insects: no one minds sleeping in the nightly dews, sleeping upon angles in the general cargo, washing in the sea. There are no lights save one hurricane lamp, which works badly and is rarely lit: there is not a book on board. Prayers, fasting, the working of the ship, a few puffs of tobacco of the most inferior kind—these are enough. The pay is a pittance for the men and practically non-existent for the boys, to whom a rupee is a fortune and an English pound unknown.

As with the people, so with the ship. She is exceedingly ill-found. There is not a decent piece of line on board, nor a piece of good canvas. The main halliards are plaited straw: all else is cheapest coir. There is not a belaying pin nor a pair of bitts, nor any proper place to belay a line: and this indeed is a cause of considerable inefficiency and some delay in manœuvres such as wearing ship. Round turns and hitches anywhere are the order of the day, and the shroud-tackles are set up to the bulwarks as best they may be.

There are Irish pennants everywhere: the rudder seems to balance precariously on a pintle: the canoe also leaks. The anchor cable is a piece of coir line. The anchor is let go by the negro's picking it up and heaving it over the side. The crew climb aloft by walking with their toes up the main halliards: the main-mast works heavily as she rolls. She steers—or is steered—very badly: they think little of being several points off course. There is no place to put sidelights, which are supposed to be on board. (There is a certificate for them). Freeboard is practically non-existent and the sea is kept out with a piece of straw. The sail is sewn roughly with weak round-seams from cheap Japanese mill-ends, and the clews are strengthened with sacks. The bolt-rope is of one-inch coir: the shrouds are parcelled coir, the parcelling painted black and white in bands and the pendants led each to a gun-tackle, the blocks of which work very badly. The wood from which the ship is built is unfinished and her underside is smoothed with a mixture of tallow and lime (which also helps to preserve her): the beams are unsquared bits of knobbly and very knotty trees, set close together: she is infested with spiders, ants, mosquitoes, and all manner of giant beetles Yet the crew sing at their work, and the Nakhoda knows the peace of God.

The cargo this voyage is mainly transhipped stuff from Aden, which is a big transhipment port. We have Australian flour, two cases of Japanese matches, a number of bales of Japanese cotton goods, some rice and coffee, and other things. For a 20-ton ship, she stows a lot. None of the cargo was ever touched though it lay open to the four winds, and we were short of everything and pretty hungry long before the end of the passage.

As for the passage itself, after passing Mocha we continued to anchor every night and to sail by day with the favouring southerly wind, getting under way usually before dawn—unless we were in a particularly nasty place—and coming to anchor in the last light of day. Then a meal, and prayers, and sleep: perhaps a landing in the canoe to fossick for firewood on some small sand cay, for we were also short of that. I seized these opportunities to bathe, and scrub myself with sand which is an effective manner of cleansing. At first we wandered slowly by the Yemen coast, but it was hazy and we did not see much of it: what we did see was certainly different from the usual Arabian skyline with its air of hell-fire and desolation. Then came the reefs, which for all their sinister thickness and their jagged teeth gave surprisingly little evidence of themselves. We sailed for days between scattered lines of flat sand cays and the low shore of the mainland. Here Ahmed was particularly careful, sometimes going even to the lengths of sounding: when he did this it was at the end of a day's sailing, and we would be anchored in the shallow bight of some lonely cay before long. Sometimes on these cays, especially near Kamaran, there were piles of old oysters, opened and dis-

carded for their pearls, for Kamaran is something of a pearling place. Sometimes we spoke to fishermen, and bought a mess of fish from them for a little rice: sometimes, their small canoes scudded from us and would not come near. At such times Ahmed said that a Somali sambuk must have passed recently, for the Somalis are wild (he said) and do not always give fishermen in lesser numbers than themselves a fair deal.

At other times we spoke sambuks, two from Massawah one morning, in the inside passage off Midi: they were beating down to Aden and came the inside way for its flat sea. They know the reefs. In the early stages—before we sailed among the reefs—sometimes we saw steamers, in long procession wandering silently up and down the Red Sea. For all their size, their power and apparent contempt of the elements, they seemed dead things, as if life had departed from them and no living thing was on their decks, but they continued on their insensate and useless scheduled ways like clockwork things let loose in a big pond: for it seemed to us being alive in a ship that lived that the great powered things could not belong to our world. Ahmed never looked at them. The mate sometimes pointed and said 'Barbor' with great contempt.

So we came up past Kamaran, an orderly place which is a pilgrim station for the faithful from the East: here the British flag flew before a white residency on a small hill, and the channel in was well marked. There were several sambuks in the tiny harbour: all these Red Sea 'harbours' seem either to be open roads or tiny bays fit only for small dhow anchorages. We saw a number of fast fishing canoes off Kamaran and any number of fish, but caught nothing ourselves. The wind was good that day and we made good progress: her average rate of sailing, I should say, was about 70 or 80 miles a day. That day we were very short of firewood, and part of an old and decaying rib was hacked out of the poop. We were anchored in the day's last light, and at once hoisted the canoe out with two of the shroud tackles fast to strops rove temporarily through eyes bored in the canoe's stem and stern. We landed on a cay full of crabs but we found a box and some other driftwood which was very acceptable.

The next day—Monday, November 4, the 6th day from Aden—we carried a spanking southerly all day and the Nakhoda, after the first was split getting under way, changed to a smaller mainsail. Usually the ship was got under way by heaving in the coir cable until the anchor was up and down, and then setting the sail and breaking the anchor out: in ports the sail would be hoisted, fast in palm-frond stops along the yard, all of which could be parted at a jerk of the sheet. We ran on well all this day, in flat water behind the long line of reefs which rarely—apart from the low sand cays—gave any evidence of their presence. Here apparently shoal water

does not show as it does in the South Seas, and the reefs do not throw off that white and pale green light which marks them so vividly (when the sun is right) in the Coral Seas: and for that these Red Sea reefs are much more dangerous. We are very close to the sea here; perhaps from a greater height there might be more chance of seeing them. Be that as it may, they certainly cannot be as clearly defined as the ordinary white reef of the South Pacific Ocean.

We anchored this night rather earlier than usual, a sure sign that we were in dangerous waters. Our anchorage was in the lee of a tiny cay somewhere off Midi. Here again we landed, and scared away the fat sea birds. The next day, getting under way just before dawn, we sailed all the cloudless day between the cay-marked reefs and low shore under much the same conditions as the previous day. In the early afternoon the headland of Gizan was visible in the distant haze, and by mid-afternoon the fort-surmounted hill to the south'ard of the town was in clear view. In the early evening, with a declining wind, we arrived: and I thought Ahmed brought her very skilfully to her anchorage. The anchor down, his son passed him up clean clothes, boarding officers came aboard, and the passage was done.

We paid 30 Rupees for the passage. This was received pretty well though without enthusiasm. I also made the Nakhoda and the mate small presents, and distributed a little backsheesh to the crew. After this the mate asked for more backsheesh, and since he had been very generous with his tea I gave him an extra rupee or two, with which he was well satisfied. He was something of a tough: aged 24, he had been a sailor since boyhood, like all the rest of them. Muscat, Karachi, and Bombay marked his farthest wanderings. To the Nakhoda I gave a very good turban, in blue and gold, which I had bought in Aden.

He was a good chap and I liked him: I saw him only once again. It was in the office of the chief of police the next evening. A hackled wretch squatted on the floor: at a small table a youthful clerk scribbled steadily. The chief of police, grandson of a Turk, sat neat, dapper, and suspicious at his big desk with a litter of papers before him and his silver-mounted pistol reclining in its decorated holster on the wall. His aghal and head-cloth had been discarded, for it was very hot and no breeze stirred through the open windows: his head was covered with a small silken cap in purple and red and gold, which showed his pale parchment skin and rather handsome face off well. Before him Ahmed stood, barefoot and beads in hand, gentle-faced as always and waiting for his turn to ask for what he needed. A figure of utterly no importance there, with the heavy-booted policemen clanking in and out, he stood patient and humble waiting until such time as the chief might look up and notice his presence.

I noticed that the sailors from the Nakhoda down had a great affection for their ship, and though we never saw a long-voyage sambuk which did not look better than she did, they never noticed this and would hotly contest the statement, for the *Sheikh Mansur* was their home and their living, and they were proud of her.

Here are some odd facts and some figures of more technical interest:

The ship, on deck was 55′ × 14′, and the depth of hold was 7′. I should say her loaded water-line was not above 48′, and light 3′ less.

Her topsides were oiled teak and her underwater body teak fish-oiled and limed. She had a triangle of green, like a mouth, painted at the bow.

Her ribs were Lohaiya cherry-wood of the kind commonly used in Red Sea dhows, set very close together.

The canoe was 17′ × 2′ 4″ × 19″ deep.

The mainmast was a trunk of Malabar teak 39′ long, of which 34′ was above the heavy thwart against which its weight rested at what would have been the deck. The circumference here was 29″.

The depth of hold at the well was 6′ 5″, from this same thwart.

The main halliards were of five-stranded straw-rope $1\frac{3}{4}$″ in diameter.

The upper block of the halliards was a double block used as two singles, the halliard for some reason having two hauling parts. This appears to be common to all zaruqs and sambuks, just as is the double tie. The lower block was a foot-block built into the ship, across two beams, the lower one of the ordinary ship's beams and the upper the rounded beam around which the halliards were belayed.

The mainsail was bent beneath the yard, round which coir stops were passed and reef-knotted: roughly one to each cloth.

The bolt-rope was 1″ coir.

The mainsail cost about £3.

The ship was worth about Rupees 2000, said the Nakhoda.

The mainsail contained about 1500 square feet of canvas, or something less. This was the largest mainsail, for which a small extra piece had to be lashed to the fore end of the lateen yard.

The cable was 2″ (diam.) coir.

The ship was always worn and never tacked, but she did not lose much by wearing. There was a double vang on the lateen yard, used in wearing to shift the yard.

The cooking utensils included a few stones, two small kettles, two saucepans, and a kind of pestle and mortar in stone for beating out corn and salt, and for rolling the *khubz* (unleavened bread). This made a noise which at first I thought was pumping.

The sail was always lowered well before anchoring, and the ship manœuvered to anchor with her way. She kept some way a long time.

The parral was a strop of rope set up by means of a toggle and tackle which could be tightened from the deck. The yard was strengthened, as in all these smaller Arab vessels which I have seen, with a fished piece where the halliards and parral were fitted—in other words, where it was slung.

The sail locker was a bag, stowed where handiest. They repaired the sails with a primitive kind of single-stranded string, unwaxed. They only used the round stitch, and that homeward-bound rough stitches.

The Nakhoda led the evening and predawn prayers, with his beads on a sack before him.

The lateen sail was a good puller, very good by-the-wind, and remarkably free from chafe. But it was unwieldy, bad in a calm, and could be dangerous especially if taken aback. It was very awkward to handle.

The date matting which acted as bulwarks was stitched through to the upper planking, and stretched to poles set along forked pieces of wood about three feet high, on both sides, from the poop to well forward of the mainmast.

The main sheet was a piece of coir one end of which was clove-hitched to an iron ringbolt on the poop and the hauling part rove through a cleat—it was not a block but just a piece of wood with a hole in it—lashed to the clew of the sail and made fast usually round the unused mizzen-mast.

The parral was always loosed when the yard was hoisted or lowered and set taut when the yard was up.

The compass appeared to be a very old one of the type with which the lifeboats used to be supplied in the interior type of tramps.

Coming into Gizan, a 'flag' was hastily made from a piece of cloth, and displayed from a staff aft, this apparently being the prescribed method in Arabia for announcing the arrival of a vessel from abroad—from some other port of Arabia, or elsewhere—awaiting clearance.

I was surprised at the extent to which a kind of 'family' or tribal life existed among the crew. When we paid our fares, the amount of which had by the arrangement at Ma'alla been left to us to fix, the news was at once passed out to all hands. I found that this was because they were paid by shares. When the Nakhoda had a letter the contents of which, apparently, he very much wanted to know, he tried first, very ineffectively, to open it himself. This he kept up for two days, failing dismally. Then the mate tried, and then his son, and finally all hands had a fling at trying to open that letter. There was no secrecy about it. Finally, the envelope proving

thoroughly obdurate, all attempts had to be abandoned: but I wonder what the recipient, when he finally got the letter, thought of the battered condition of its covering. It had been steamed, smoked, poked at with knives, sticks, and anything else that came to hand, and there was no attempt at disguising the fact that it had been very much manhandled. Again, such as they were, the crew seemed gladly to share their few possessions: and when the poor treasures were brought out from beneath the poop to be looked at, they appeared to take as much pleasure in the contemplation of a desirable object which was the property of someone else, as if it were their own.

The Nakhoda was 35 years old, as far as he knew. Though woefully ignorant by European standards, he was a skilful ship-master in the trade and kind of ship in which he sailed. The ship herself, though likewise woefully lacking by most other standards, was perfectly adequate and suitable for the trade she served. She sailed only in the good-weather season, laying up in the S.W. monsoon. Her earnings were from freights.

FRANÇOIS EDMOND PARIS FRENCH ADMIRAL

By Etienne Sigaut

FRANÇOIS EDMOND PARIS[1] was born in Paris on 3 March 1806 and entered the French navy under Louis XVIII, King of France.

His father, Pierre Théodore Paris, was, when François was born, a member of the French administration so firmly established by Napoleon; he was 'Vérificateur de l'Enregistrement et des Domaines', a profession with a background of legal and financial knowledge.

His mother, Françoise Virginie Bersolle, was the daughter of a man recorded in the municipal register of births as 'rentier', a ship-owner at Brest.

One may assume that young Paris took from his mother's side the love for the sea and ships which directed him to a naval career, and from his father the taste for precise and scrupulous work which was later a trait of his character.

The family lived in Illyria from 1809 until 1813, when the French troops

1 The name Paris should be written without 'accent circonflexe' (Paris, not Pâris) as it has been sometimes printed by mistake. Curiously enough, the French pronounce 'Paree' for their capital city, and 'Pariss' when it is a family name.

stationed in that country retreated to Venetia. Edmond Paris was then 7 and went with the family to Brest.

Education in French schools at that time was chiefly directed to the Latin, Greek and French languages. No mathematics was taught below the second class, but elementary mathematical knowledge was required for entry to the naval college. Young Paris soon decided to join the navy, for, when he took the examinations for the naval college, his headmaster's commendation states that 'this good pupil is in the fourth class, and, as the study of mathematics begins only in the second class, he has followed special courses on mathematics and deserves to be admitted'.

Nothing in the early documents indicate that Paris took special lessons in drawing and painting. In 'bourgeois' families of that time art was not specially encouraged, parents being horrified at the idea of their son's wanting to become an 'artist', i.e. a confirmed and pennyless Bohemian. Paris, anyhow, through a natural gift, eventually attained to professional standards.

After two years at the naval college, Paris was promoted to 'élève de deuxième classe' on 4 May 1822. Two weeks later he arrived in Brest and on 6 September embarked on the schooner *La Gazelle*, which on the 10th left for Toulon, anchoring there on 29 September. On 6 October *La Gazelle* left for the eastern Mediterranean, and, at Milo, Paris was transferred to *L'Ariège*, a corvette whose duty was to protect trade against piracy in the Greek archipelago (still Turkish at that time). On 8 April 1823, he left *L'Ariège* and joined *La Salamandre*, another corvette, which, after nine months patrolling in the eastern Mediterranean, arrived at Brest on 4 May. On 16 May, Paris was put ashore waiting for a new appointment.

The above details on Paris's first assignment, if presenting no historical interest, are intended to show how the French navy, which had then no school ship, used to train its midshipmen, first in small ships, in coastal waters, next on sloops in the Mediterranean and later on frigates in the Atlantic.

Paris joined his first frigate, *L'Amphitrite*, on 1 June 1824 in Brest. He had then been twenty months on ships, most of the time at sea, and was already, at 18, pretty well 'salted'. *L'Amphitrite* sailed on 16 July for an Altantic cruise, Paris being promoted 'élève de première classe' with seniority from 1 May. When the ship returned to Brest in 1825 Paris was transferred to *L'Active*, a 'gabare', which sailed for Scotland in October 1825, and was back at Toulon on 21 February 1826.

In 1826, the era of great discoveries in the Pacific Ocean was over, but that of hydrography and chart-making had begun. With this as a chief aim, Dumont d'Urville was preparing a voyage of circumnavigation to last about three years. He had chosen the ship on which he had already sailed

around the world, with Captain Duperrey in command, from August 1822 to 24 March 1825. The corvette, as she was called, had been built in Toulon in 1811 as a 'gabare-écurie' intended to carry horses. A model of her still exists in the Musée de la Marine in Paris, with mangers and horse-boxes. She was first named *La Coquille* and under this name had been at sea with Duperrey and Dumont d'Urville for more than 31 months, covering 25,000 miles without losing a man, with no sick on board and with no damage either in the hull, masts or yards, not even in the sails. Her draft of a little more than 12 feet was one of her good features for a voyage in uncharted waters.

Dumont d'Urville took great care in fitting her out for the voyage, and the choice of the staff and crew was left to him. No doubt Paris's knowledge of the technical side of navigation and his gifts as a draughtsman had already been noted, as he was picked as the senior of the three midshipmen to join the staff, acting as second lieutenant. He was officially promoted as an officer on 29 October 1826, when the ship was already near Australia (still called New Holland).

La Coquille was re-named *L'Astrolabe* in La Pérouse's memory. One of the missions of Dumont d'Urville was to ascertain the place where La Pérouse's ships, *L'Astrolabe* and *La Boussole*, had been wrecked and to look for survivors, if any had escaped to live in some unknown island. On 4 April 1826, Paris joined the new *Astrolabe*, which sailed on the 25th. One can easily imagine the enthusiasm of the young man when chosen, for his first assignment as an officer, by such an experienced chief as Dumont d'Urville, for a voyage in strange and distant countries.

The voyage lasted almost three years, opening with a 100 days passage from La Praya (Cape Verde Islands) to King George Harbour on the southern coast of Australia. In trying and often dangerous conditions the work of exploring, surveying and charting assigned to the expedition was carried out on the coasts of New Zealand, Tonga Islands, Fiji Islands, Loyalty Islands and New Caledonia, New Ireland, New Britain and the Eastern Coast of New Guinea. After a call at Amboyna, Moluccas, in September 1827, *L'Astrolabe* sailed again, via South Australia, to Hobart, Dumont d'Urville's intention being to return to New Zealand to complete hydrographical work on the coasts of Ikana Mawi. In Hobart, he changed his mind. A swordhandle and other objects giving convincing evidence that La Pérouse's ships had been wrecked in the vicinity had been bought from the natives by Mr Dillon, master of a small ship owned by the East India Company. *L'Astrolabe* then sailed for Tikopia. From 20 February 1828 to March 21 the exact location of La Pérouse's ships was found on the reefs surrounding Vanikoro Island. A simple monument was erected nearby. The second task of the expedition was fulfilled.

The return passage ended at Toulon on 2 April 1829.

The chart-making work of the expedition amounted to eighty surveys, later condensed into an atlas of forty-two charts, bearing a note attributing the merit of the work to Messrs Lotin, Gressien, Guilbert and Paris.

As to Edmond Paris's personal nautical research work, a large part of the later *Essai sur la Construction Navale des Peuples Extra-Européans* is its best testimonial.[1]

Hereafter are mentioned his plans and drawings published in the latter book, in the chronological order in which they were made during the cruise:

New Zealand canoes (13 January to 18 March 1827), Charts 112 and 113.

Craft of Tonga Islands (2 May/21 May 1827), Plates 118 to 122 incl.

Fiji (Viti) Islands (25 May/12 June 1927), Plates 116 to 117 incl.

New Ireland (July 1827), Part of Plate 116.

North of New Guinea (August 1827), Plates 104 and 105.

Moluccas (September 1827 and later June/July 1828), Plates 101 to 103 incl.

Santa-Cruz archipelago (Vanikoro) February/March 1828, Plates 114 and 115.

Caroline and Marianne Islands (April/June 1828) Plates 106 to 111 incl.

Celebes (July/August 1828) Plates 97 to 100 incl.

On 7 April 1829 Paris left *L'Astrolabe*, was sent to Brest, and was granted his first leave from 1 July to October 1. From the latter date he served ashore in Brest until 23 November, when he was sent to Toulon.

Captain Laplace was preparing the next 'circumnavigation' voyage on the corvette *La Favorite* (launched on 16 June 1829), and 'enseigne' Paris was chosen as one of the ship's officers.

La Favorite left Toulon on 30 December 1829, and her first port of call was Gorée Island, Sénégal, next, Bourbon and Mauritius, Pondichéry, Madras and the coast of Coromandel. She stranded near Yanaon, fortunately on a mud bank, on 29 June 1830.

Edmond Paris and his friend de Boissieu, working from the ship's boats and from native craft, gained special mention from Captain Laplace in the log: 'the same evening, owing to the activity and intelligence displayed by Mr Paris in this operation and in those of the same kind in the next few days, the corvette was able to withstand sea and current. . . and on the 6th July the ship could be considered as out of danger.'

They called for several days at Coringui, where a damaged rudder was repaired, and this gave Paris the opportunity to carry on with his plans and

1 In this work, the plans or drawings are numbered by PLANCHES, meaning a full page lithograph. The word bas been translated herein as PLATE.

drawings of native craft (Plates 25 to 39 of the *Essai*). This work was continued farther north up to Calcutta.

La Favorite sailed to Luçon, via Malacca Straits (Plates 42 to 43), and in October 1830, in Manila, more drawings and plans were added to Paris's album (Plates 69 to 75) of the *Essai*.

On 2 November 1830 *La Favorite* left Manila, *en route* for Macao. She anchored near that Portuguese port on 20 November, remaining in the Macao Roads for more than a month. Paris did not accompany Captain Laplace and two other officers to Canton, but spent his free time measuring and drawing Chinese junks (Plates 49 to 62 of the *Essai*).

With the prevailing strong north-east monsoon, *La Favorite* sailed on 18 December (1830) to the coast of Annam.

During the call at Macao, her staff had learned of the capture of Algiers and celebrated. The log does not mention the fall of their former king, Charles X, heard of at the same time, and their sailmaker had to sew the new tricolour ensign, under which they had to sail from then on.

On 22 December they were in Tourane roads, where they were to stay until 24 January 1831, the time being used by Paris in hydrographical work, pursued northward along the Annam and Tongking coast.

Paris completed the chart of the mouth of the Hue River and of 80 leagues of the North Annam and Tongking coast. He also carried on with his nautical research work (Plates 44 to 48 of the *Essai*).

His next hydrographical work was between the Malacca peninsula and Borneo, the shoals and reefs of which were, in those days of sail, dangerous hazards to navigation. (Their native craft are described on Plates 83 of the *Essai*.)

La Favorite left on 4 April 1831 for Java. Drawings of the craft of Soerabaya and Bali Straits illustrate Plates 84 to 96 incl. of the *Essai*.

Long days at sea were to follow, the corvette's next call being Hobart via Port-Jackson and the North of New Zealand. The Pacific Ocean was crossed to Valparaiso (Plate 130 of the *Essai*), Cape Horn was doubled, and with a call at Rio de Janeiro (Plate 131 of the *Essai*) *La Favorite* ended her long voyage at Toulon on 20 April 1832, one year after leaving Java.

On 11 May Edmond Paris left *La Favorite* and on 18 June left Toulon for Paris, where he had been called to work in the 'Dépôt des Cartes' of the navy, on the charts to be engraved from data collected during the voyage.

On 1 September 1832 he was promoted 'lieutenant de vaisseau'. He was 26. He worked in the 'Dépôt des Cartes' until July 1833. On 30 April 1833 he received the cross of Chevalier de la Légion d'Honneur in recognition of his hydrographical work on *L'Astrolabe* and *La Favorite*.

Steam propulsion for ships was still in its infancy. Many naval officers were reluctant to discard the stately sailing vessels for the love of which they had joined the navy; any ship-lover will understand this feeling. Lieutenant de vaisseau Paris, anyhow, soon understood that the change, heart-breaking as it was, had to come.

While working at the 'Dépôt des Cartes', he followed on his own initiative the researches on the steam-engine carried out by Messrs Dupin, Pouillet and Clément. At the same time he was studying English.

In a letter addressed to the Ministry of the Navy, when his work on charts was nearly finished, he asked for three months' leave to go to England to study marine steam-engines in a practical way.

Leave was granted on 9 July 1833, and Edmond Paris spent three months, from 1 August, in Messrs William Fawcett's Works. He then asked for an extension and spent three further months on British merchant steamers, adding practice to his theoretical knowledge of marine engines.

In 1834, after having received from Edmond Paris a documented report on his work in England, the Minister of Navy appointed him as Captain of one of the new steamships, *Le Castor*.

Paris took command on 27 September and spent two years in monotonous voyages between France and Algeria, mostly for the needs of the army. Paris's attention during that period was directed to the practice of 'mixed navigation', steam with sail, and the economical use of engines in order to minimize coal consumption.

On 10 December 1836, *Le Castor* being in Toulon, Paris's time of command ended, and he was ashore a short while, as he had been picked by his former chief Laplace for another 'circum-navigation' voyage. Paris was reverting to sail.

The ship was the frigate *L'Artémise*. Paris embarked on 18 January 1827, and on the 21st the ship left Toulon.

This time the cruise took Paris, via the Cape of Good Hope, to the coasts of Arabia (Plates 2 to 9 of the *Essai*), western India and the Coromandel coast (Plates 10 to 24 of the *Essai*), and other countries already visited by him on the preceding voyages. *L'Artémise* called at Macao and stayed there about twenty days, during which time Paris went to Canton (Plates 63 to 68 of the *Essai*). The situation was tense between British and Chinese; the 1839/40 war was about to start.

The return to France was through the Pacific Ocean and the coast of South America, from Callao, Cape Horn, Montevideo, to Lorient, where *L'Artémise* arrived on 15 April 1840, nearly three years and three months after her departure from Toulon.

Paris had made about 600 coast outlines and 100 large water colours of landscapes and monuments.

Unfortunately, his longing for more knowledge about engines caused the loss of his left arm. In June 1838, when studying and taking drawings of a steam-engine in motion in a foundry at Porto-Novo, on the Coromandel Coast, he was caught by a moving part and had his left hand crushed. The forearm had to be amputated.

Captain Laplace, reporting from Madras on 6 June to the Minister of the Navy adds: 'He (Paris) owed his life to the courage and coolness he showed in this awful circumstance in spite of the pain he was enduring. If, like all his companions and friends, your Excellency had been able to appreciate the moral strength and fine character of this worthy officer amidst such poignant sufferings, you would have understood how such a man could behave under enemy fire.'

After the amputation, no doubt effected on board by the ship's surgeon, Paris remained on board, and there is no mention in his naval file of an interruption in his duties.

Edmond Paris left *L'Artémise* at Lorient on 11 May 1840 and went to Brest, where he arrived on the 18th. On the 25th he was appointed 'Sous-aide major', i.e. one of the officers of the naval harbour staff.

In the meanwhile, Captain Laplace had asked that Paris be called to the French capital to help him in the account of the voyage which was to be published. Paris left Brest on 4 August, and a long stay in Paris was to follow, during which the Naval Minister was shown the plans and drawings of native craft made during the three preceding voyages. On his proposal, King Louis-Philippe ordered that an album be published at the government's expense.

In a report, dated 13 May 1841, to the 'Directeur des Ports' Edmond Paris showed that he was a man of taste, in criticizing the inartistic results of chromo-lithography used in other albums, through the difficulty of obtaining adequate colours. He advocated the use of a general light-buff tint with a few white high lights.

The preparation of this book gave Edmond Paris considerable trouble. In its preface, he mentions that he was at first 'frightened by the task'. To quote him: 'It was not the work occasioned by the reduction in scale of 800 different figures spread on 300 plates which stopped me, but the impossibility of making the description of them interesting.' He evidently thought that very few people were interested in nautical research.

Anyhow, Edmond Paris found the way to carry out the work, and, at the same time, to take advantage of his stay in Paris to follow courses at La Sorbonne and 'L'Ecole des Arts et Métiers' and to visit numerous works

to further his knowledge on the scientific side of his profession and chiefly about steam engineering.

We may also assume that he found time for less arduous subjects, for he was 'authorized' by the Minister of the Navy, on 22 April 1842, to marry Nelly de Bonnefoux, daughter of one of his senior officers, 'capitaine de vaisseau', commanding the training ship *L'Orion*.

Edmond Paris was then 'Capitaine de Frégate', having been promoted to that rank on 30 September 1840.

On 7 December 1842, Edmond Paris presented a petition to the Minister for the command of one of the naval steamships, 'preferably on a transatlantic voyage'. As a result he received the command of the steam-sloop *L'Archimède* on 13 December 1843. This gave Paris time to see his first son before leaving France.

Instead of a transatlantic voyage, *L'Archimède* (220 H.P.) was chosen with two sailing ships, *La Sirène* (Captain Charner) and *La Victorieuse* (Captain Rigault de Genouilly), to convey the first French Embassy to China, led by Mr Lagrené who left in *La Siréne*. The two sailing ships left Brest on 12 December 1843, and *L'Archimède*, using steam and sail, on 20 February 1844. She called at Cadiz, Santa Cruz de Teneriffe, Gorée, Cape Town, Bourbon, Ceylon, Pondichéry, Madras, Singapore and Manila, arriving at Macao on 24 August two weeks after the sailing ships, which had called at Santa Cruz de Teneriffe, Rio de Janeiro, Cape Town, Bourbon, Madras and Singapore. The sailing ships took 93 days for the passage, *L'Archimède* less, so that the advantage of auxiliary power over sail, as far as rapidity was concerned, was not this time evident.

L'Archimède was the first French steamship to be sent to the Far East. She made several voyages between China and Suez, this new route to Europe, the 'transit in Egypt', having become usual.[1] Edmond Paris, during this cruise, applied himself to the best methods of covering long distances with the smallest coal consumption, sail helping steam whenever possible. He sent to the Minister reports on the matter with detailed tables, so that his own experience might be useful to other captains. The practical side of Paris's mind, his constant tendency to apply theory to practice and throughout to make his own work useful to others, is amply demonstrated by his reports and books he wrote after the *L'Archimède* cruise.

The situation in China had undergone important changes since the Nanking Treaty. The aim of the French government, in sending an Embassy to China, was to sign a treaty opening China to French citizens. The parley

1 One or two years before, a British Company, the 'Transit Company', had organized the transit between Suez and Alexandria, the passengers in light carriages, the luggage by camel. It took 18 hours when everything was going well.

took place in Macao, and the treaty was signed at Whampoa on 24 October 1844. Admiral Cécille, chief of the French naval division in Chinese waters, sent *L'Archimède* to Suez in March 1845, entrusting Edmond Paris with the duty of carrying personally his despatches to the French government. Arriving at Suez in May 1845, Paris performed the mission and sailed from France to Egypt on 16 September to join *L'Archimède* at Suez and return to China.

In May 1846, *L'Archimède* was again at Suez, bringing back the French Ambassador to China. Edmond Paris found a letter from the Minister, giving him the choice, either to hand over command of his ship to his senior officer and come to France or to keep his command, 'according to the state of his health'. Paris replied that his health was good (but that his wife's was not) and that he was ready to do whatever he was ordered. On 25 May the Minister sent him instructions to return to France, and on 12 June Paris sailed from Alexandria for Marseille, where, after the then usual quarantine of a week, he went to Paris on 1 July 1846.

On 8 September 1846, Edmond Paris was promoted 'Capitaine de Vaisseau' (Second Class) and on the 16th was given the command of the royal yacht *Le Comte d'Eu* then being completed at Le Havre. On 1 January 1847, he took command and kept it for a year.

The political situation was now getting tense in France, and King Louis-Philippe had not much time to use his yacht. Paris spent his leisure hours in writing the second part of a *Dictionnaire de Marine à Voile et à Vapeur* (Dictionary of sailing and steam vessels), the first part of which (sail) was written by his father-in-law, Captain de Bonnefoux.

It was a book of 860 pages, in octavo, containing numerous plans. The first edition was printed in 1858.

The destiny of the *Comte d'Eu* was unfortunate; one would think she was sharing the misfortunes of the last French king, whose throne was already shaking.

On 2 August 1847, the *Comte d'Eu* left Havre. She was still near Barfleur when her boiler exploded, killing ten men and severely wounding eight.

On 5 December of the same year, she left Havre again for Cherbourg, with her engine still disabled, in tow of *L'Alcide*. During the night the weather deteriorated, and the tow-ropes parted. She had to put into the Downs and the next day put to sea under sail, trying to reach Calais. The weather did not improve, and she had to take refuge at Ramsgate where she was beached. Captain Paris had to engage in difficult negotiations to obtain locally the necessary material for urgent repairs and to find a tug-boat. This took time, and she was not able to get to Cherbourg before 1 January 1848, in tow of the British S.S. *Lion*.

The reign of 'Louis-Philippe' was now very near its end.

In January 1848, Captain Paris was given command of the *Gomer*, a steamship which was laid up in Cherbourg for important repairs; she remained attached to Cherbourg for nearly two years, sailing on 13 February 1850 for Cadiz, Algeria and Toulon, where she arrived on 7 March.

Paris had availed himself of that time to write a practical guide-book, designed for the engine-room personnel, in the form of questions and answers on the use of marine-engines, called *Catéchisme du Mécanicien à vapeur*, an octavo book of 750 pages, with figures. It contained a description of possible accidents and the way to obviate or deal with them.

Captain Paris was authorized on 4 July 1850 to go to Paris for the publication of this book, which, as soon as it was available, was translated by two Dutch naval officers. A little later the Austrian Lloyd translated it into German. The *Catéchisme* became the standard book in the French navy.

On 9 October 1850, Captain Paris was appointed to command the steam-frigate *L'Orenoque* in Toulon and took command from 22 October. This ship was used as a transport vessel between France, Corsica and Algeria; and in the course of numerous voyages Captain Paris further worked on the question he considered essential to efficiency in coal consumption.

In October 1851, Paris, expecting to be put ashore, wrote to the Minister asking to be considered for the command of an auxiliary ship, preferably the *Montebello*, which was to be remodelled with the addition of a steam-engine (which work was to take about one year), and to be left in the meanwhile in *L'Orenoque*, as it is only after four years of 'rank and of useful work that I have obtained this ship', and it would be 'painful to fall again into inaction'.

He was left in *L'Orénoque* for one year more and did not obtain a new ship until 1854.

After disembarking from *L'Orénoque* in September 1852, Paris published, again in collaboration with Captain de Bonnefoux, another practical book entitled *Le Manoeuvrier Complet*, the part about steamships being entirely written by Paris.

The next year (1853) was spent in Paris, where he was attached to the 'Dépôt des Cartes et Plans' of the navy until 31 December. On 11 June he was promoted 'Capitaine de Vaisseau de première classe' and from 29 June was appointed assistant member of the 'Conseil des Travaux de la Marine' (Board of Naval Works), a full member from 31 August.

He wrote a new book, published in 1854, '*Traité de l'Hélice propulsive* (treatise on screw-propeller). The first part contained a translation of a book written in England by Bourne on the same subject, and the second one

practical details on the construction, disposition and use of screw-propellers and marine-engines.

This book became the standard work on French naval vessels.

In March 1854 Paris received an order to go to Brest, 'which harbour was short of officers of his rank', but the 'Préfet Maritime' of Toulon asked that Captain Paris be sent to Toulon to attend to the mounting of a steam-engine on the first-rate ship *Fleurus*, which was then to be remodelled as an auxiliary ship. On 26 May Captain Paris was given command of the latter ship, which on 1 July left for Marseille, Algiers and Cagliari (Sardinia being the ally of France, Great Britain and Turkey in the Crimean War), and on 4 February 1855 the *Fleurus* left for the Black Sea transporting 1160 men of the French army.

The part of the *Fleurus* was a useful but inglorious one; she was detailed with the *Prince Gérôme* for the transportation of the land forces, their supplies and ammunition, occasionally towing other ships and, on the return voyages to Constantinople or France, bringing back sick and wounded.

Her crew formed part of the 2450 men of the French navy which reinforced the artillery forces bombarding the Sebastopol defences from the land.

After the capture of the latter place, the last success of this war was entirely due to the French navy, i.e. the capture of the Russian fortress of Kinburn, at the mouth of the Dnieper, thus blocking the ports of Kherson on the Dnieper and Nikolaieff on the Bug. The British and French combined squadrons (Admiral Lyons and Admiral Bruat), although inactive, were very interested witnesses of the work of the new French 'floating batteries' (The *Devastation*, the *Tonnante* and the *Lave*), which in four hours destroyed the Russian defences, losing only 2 men killed and 22 wounded, though hit 210 times on their iron-clad sides. Slow, clumsy and imperfect they were the ancestors of the future *Dreadnought*.

The capitulation of Kinburn took place on 17 October 1855 and the main part of the fleet left. Bruat, before sailing, appointed Captain Paris Commodore of the Kinburn station with powers of senior officer of a naval division. Paris left the *Fleurus* on 23 October, taking the *Le Vautour*, a steam-corvette, as his flagship, which with the rest of the ships was soon icebound. The men, who during the preceding months had had to face the scourges of this war, cholera and typhus, again had a hard time.

He did not fail to make use of his artistic talents and brought back to France, at the end of the campaign, drawings used later for the printing of an album entitled *Nos souvenirs de Kil-Bouroun*, published by subscription of the staffs and crews of the naval division.

On 21 June 1856, *Le Vautour* brought Captain Paris back to Toulon. Paris spent three weeks with his family in Paris, during which time he was appointed to command the steam-frigate *L'Audacieuse*[1] at Brest. He took command on 23 July and sailed to Cherbourg. In September the ship was attached to the Mediterranean squadron.

This same year, Captain Paris published an appendix to the *Catéchisme of Marine Engineers*, 200 pages with plates.

In April 1857, *L'Audacieuse* was detailed for a long cruise on the coast of China. For the first time Captain Paris, then 51 years of age, felt the need of rest and applied to leave *L'Audacieuse*. Perhaps also his desire to follow the construction and future trials of the famous *Great Eastern* affected this decision, as his request was at once accepted, and, leave granted, Captain Paris applied for authorization to go to England, 26 October 1857.

That year Paris published a second edition with an appendix, of *Le Manoeuvrier complet*, on the new handling of steamships. This edition was specially designed for the use of officers and apprentices of the merchant marine.

Captain Paris went to England, inspected the *Great Eastern* and established friendly relations with naval architects and members of the Board.

On 18 January 1858 Captain Paris was promoted permanent member of the' Conseil des Travaux de la Marine' in Paris. This same year he published a new book: *Utilisation économique des navires à vapeur* based on actual performances of naval and mail steamers over several years.

The French–Austrian war of 1859 was short, and the navy took no part in it. In August, Captain Paris was sent to Brest as 'Major Général de la Marine'. Soon after, he was invited by Mr William Smith, on behalf of the board of the Great Eastern Company, to attend the trials of the *Great Eastern*, which 'will begin on 8th September and will include a cruise of four days in the Channel.'

Captain Paris was ordered by his Minister to accept this invitation and to go to England, with special allowances from the navy.

Edmond Paris, who had been enthusiastic about the *Great Eastern* project, was no doubt greatly disappointed at the news of the subsequent misadventures of the giant ship.

In 1859, a second edition of Paris's *Dictionnaire de Marine à vapeur* was published; this time the book contained translations of about 1800 technical terms in English, German, Dutch, Danish, Spanish, Italian, Swedish and Russian with reference to French terms, with a special chapter for each of these languages.

1 A model of *L'Audacieuse* is exhibited in the Musée de la Marine in Paris. She was built in 1855 to the plans of Dupuy-de-Lôme.

On the 7 November 1859 Edmond Paris was promoted to the rank of rear-admiral and in December took command of the third division of the 'Escadre d'évolutions' on its flag-ship *L'Algésiras*, in Brest.

On 29 March 1860, the division left Brest for Toulon and on 8 July sailed for Naples, where the last king of Deux-Siciles was feebly defending his throne against the Garibaldians. The French navy ensured free communications between Naples and other Mediterranean ports; and, after the city of Naples surrendered on 7 September 1860, *L'Algésiras* and the division sailed back to Toulon.

In May 1861 Paris's division went to the coast of Syria, where French military forces had been landed in 1860 to protect Christian populations from the Moslems and Druses, a semi-autonomy of Lebanon being thereafter imposed upon the Turks by France, Great Britain and Russia.

Edmond Paris, as usual, exercised his painting abilities during the campaign, and in 1862, after he had left his command on 19 January, an album ('Souvenirs de Jérusalem') of 14 coloured lithographs from the author's water-colour paintings, was published by subscription.

These artistic interludes did not divert him from more austere subjects; in the same year he wrote a memorandum on *Navires Cuirassés* (ironclad ships), thus evincing his constant care for a progressive evolution of the navy.

Edmond Paris's ambition, for the time of his next service ashore, was to become head of the Naval Department of Charts ('Dépôt des Cartes et Plans'). He had already applied as early as April 1860, 'for the time that this office would be vacant', though he certainly thought that this would not happen for several years. About the same time he had been authorized by the navy to present his candidature to the French 'Académie des Sciences'.

He had to wait long for both these aims, as, in August 1862, he was, instead, made again a member of the 'Conseil des Travaux de la Marine' in Paris and, as a side-activity, member of the light-house board (January 1863).

In the meanwhile, the Council of the Universal Exhibition of London of 1862 had asked him to be a member of the committee for the section of naval material. He accepted with the Minister's authorization, and in 1863 he published a descriptive account entitled *L'art Naval à l'Exposition universelle de 1862* (in octavo, 300 pages, 20 plates), 'description and discussion of various kinds of iron-clad ships, steam-packets, dockyards, with details of naval material, steam-engines, their advantages and drawbacks, etc.'. He also wrote in 1862 a notice on torpedo-boats and their maintenance.

In 1863, Edmond Paris was elected a member of the French Academy of Sciences and 'Institut de France' and member of the board of the Society

of Geography. A fellow-member of the Academy of Sciences was the already famous Dupuy-de-Lôme; the friendship between the two men lasted till the death of Dupuy-de-Lôme, who, though younger than Paris by ten years' died before him.

The sea-faring days of Edmond Paris (now 57), were over. In January 1864 he was still applying for the 'Dépôt des Cartes', insisting on the fact that 'in the past, this function had too often been considered as a position of retirement and tranquillity, whereas one should look at its usefulness for navigation and national reputation. . . .'

He was at last appointed head of that department on 2 June 1864 and promoted vice-admiral on 13 August of the same year, becoming also vice-president of the light-house and coast beacons' board. He was to keep these offices for seven years.

When the Franco-Prussian War of 1870 was declared, Edmond Paris and all the officers of the 'Dépôt des Cartes' volunteered for active service, but the navy's part in that war was practically restricted to the transportation of troops from Algeria and service ashore, such as manning batteries during the siege of Paris.

On 27 March 1869 Paris was made 'Grand Officier de la Légion d'Honneur'. The same year he published a book under the title '*L'Art naval à l'exposition universelle de Paris, 1867*, with an addition on maritime improvements and inventions later up till 1869.

Edmond Paris, who had left his personal documents and records in his mother-in-law's house, in Orly near Paris, lost them all through the German occupation of the village during the siege of Paris, a fact which deprives researchers interested in his life and work of valuable information.

On 6 March 1871 Edmond Paris, who was nearly 65, was placed in retirement from active service and at the same time appointed Curator of the 'Musée de la Marine', then in the Louvre in Paris. He managed that Museum for twenty-two years with an activity unimpaired by age. He enriched the Museum collections considerably. One hundred and twenty models of oriental craft were built by the Museum workshop from the plans and drawings he had accumulated during his voyages, and, when official grants were insufficient, he spent a part of his own income for the Museum's benefit.

Edmond Paris was always interested in marine progress and the practical application of new techniques, but, unlike those who, attentive only to the future, despise the work of the past or deem it negligible, he was impressed with the necessity of preserving all possible documentary records of the past efforts of men of all countries. When he was head of the Musée de la Marine, he thought of collecting from all countries as many documents as he

could on naval archaeology and publishing them in a series of books to be indefinitely continued. His idea, as he expressed it, was that, whereas monuments on land last a long while, often for many centuries, monuments of the sea—the ships—endure only for a short time, and therefore unfailing care must be taken to keep a thoroughly documented record of them for the use of future generations.

This task started with the publication in 1882 of the first volume of the *Souvenirs de Marine*, the preparation of which had begun in 1877. It was an album, of 4 pages of text and 57 plates. It is believed that Edmond Paris personally drew 26 of the plates, as the stroke is not as 'dry' as that of a professional engraver, and they are not signed, whereas the others bear the signature of the engraver (Geisdörfer, an engraver in the Department of Charts of the Navy). Paris explained in a preface that in the next volumes zinc engraving would be replaced by a more perfect process. Most probably the Department of Charts of the Navy agreed to engrave the plates, at Paris's expense.

The second volume was published in 1883, the third in 1886, the fourth in 1889, and the fifth in 1892, one year before Edmond Paris's death.

This work, well started, was to be pursued by the care of the French Académie des Sciences, and a yearly allowance was earmarked for that purpose. After Paris's death a sixth volume was published in 1908, due to the work of Mr de Bussy and Mr Emile Bertin, both of the Department of 'Génie Maritime' of the French navy, and fellow members of Paris in the Academy of Sciences. Later, Emile Bertin, who was 35 years younger than Paris, intended to carry on, but, before the next volume was ready for publication, the war of 1914–18 started. The subsequent devaluation of the French currency reduced to nothing the annual credit earmarked for the work, so that the 1908 volume was the last.

In 1883, Edmond Paris had written a book (in octavo) on François Roux, Painter of the Navy, who had died in 1882, and again, in 1885, another book on 'L'Oeuvre de François Roux', representing the ships of the French navy from 1792 to his death, preceded by an historical and descriptive notice with numerical tables (publisher: H. Liebert, Paris, 1885).

In 1883 there was also published by the care of Edmond Paris a large tome, giving the description of ships from the models and drawings possessed by the Musée de la Marine in Paris.

Edmond Paris died on 8 April 1893. The days of his youth in the navy were, indeed, distant. Regular steamships now ploughed the seas. He had known vessels of the eighteenth century, had sailed ships of the early nineteenth century and had seen the plans, already completed, of capital ships of 15,000 tons.

Admiral Paris died after a long life of 87 years. His name was widely acknowledged as a sailor, first and last, and also as an engineer, hydrographic surveyor, writer, artist and nautical archaeologist. He would have fallen completely into oblivion but for his nautical research work, a pastime of his youth, and the main task of his later years.

THE LEEWARD ISLES COMMAND, 1795–1796

By Lieutenant Commander James Stewart, R.N.

LORD Spencer was First Lord of the Admiralty from December 1794 to February 1801. No one else has held the office for so long during a major war. Taking his period of office as a whole, he can be rated a successful First Lord. It was under his direction that the Navy won such great victories as St Vincent, Camperdown and The Nile. These successes were won after he had been in office for some time; his earliest years at the Admiralty, whilst he was learning his duties, were less happy. They were marked by a succession of crises.

Several of these crises are widely known. The evacuation of the Mediterranean in 1796, which opened Napoleon's way to Egypt, and the Naval Mutinies of the next year, both fall into that category; but surprisingly little is known of the earlier troubles over the Leeward Isles command. The unfortunate handling of this matter caused a serious rift between the Admiralty and the seagoing fleet, which led senior officers into collective protests against Admiralty policy; an example of insurbordination which cannot have passed unnoticed by the hard-used, ill-paid men of the lower deck. The crisis dragged on for several months and was not resolved until several flag officers had been dismissed, one of them after a trial by court martial for disobedience of an Admiralty order.

Although several ministers and senior officers played some part in this affair, prime responsibility rests with Spencer. The First Lord was then very new to ministerial office. As one of the Whig magnates who followed the Duke of Portland, he had been out of office since the Rockingham administration of 1782. In January 1794, Portland broke with Fox over the question of supporting the war against France. This opened the way for a coalition with Pitt's government.

The group joined the ministry a few months later. They were a welcome reinforcement. Pitt was particularly anxious to find a new political head

for the Admiralty, then in the hands of his idle and incompetent brother, Chatham. Chatham could not be relieved immediately, because the Navy under his nominal control had just won the Glorious First of June; so Spencer became Lord Privy Seal until the interval required by the conventions of public life had expired, when he exchanged offices with Chatham.

Spencer was young and able. He brought new vigour to his new department; but he lacked experience of high office and, at first, knew little of naval affairs. He would have been well advised to proceed cautiously, relying largely on the guidance of the naval members of his Board, whilst he mastered his duties. Unfortunately that was not his nature, and, to make matters worse, the effects of his aristocratic self-assurance were aggravated by a clash of personalities.

Lord Hood was, nominally, the senior naval member of the Board; but, following the curious custom of those days, he combined his membership with command of the Mediterranean Fleet. From this command, Spencer was soon to dismiss him. Apart from this, the two men had little to do with one another. In Hood's absence, Vice-admiral Sir Charles Middleton was acting as the senior naval member of Spencer's Admiralty. He was an officer with unique experience of naval administration and a very able man —as Lord Barham and First Lord he was to be responsible for the central direction of the Trafalgar campaign—but he was not an easy person to work with.

No one knew this better than Henry Dundas, Secretary of State for War, second man in the Cabinet, and a relative of Middleton's. When Spencer moved to the Admiralty, Dundas wrote to warn him about his principal subordinate, saying that Middleton 'has very great official talents and merit, but he is a little difficult to act with from an anxiety, I almost said an irritability of temper, and he requires to have a great deal of his own way of doing business to do it well'.

Although forewarned, Spencer never seems to have been on easy terms with his principal naval adviser. Perhaps the differences of age and temperament were too great: Spencer was a youthful, self-assured English aristocrat; Middleton was an elderly, outspoken Scot; perhaps Middleton, who had been the real master of the Admiralty in Chatham's time, was unable to re-adjust himself to second place. Whatever the cause, relations between the two men seem to have remained stiff and formal, there were none of those friendly, informal discussions which can resolve differences before they become too serious for compromise.

The West Indian expedition

Soon after he joined the Admiralty, Spencer became concerned in the preparation of a large expedition to reinforce the West Indies. The situation in that theatre was serious. We had opened the war with a succession of successes; but, when our offensive effort was spent, the French had counter-attacked. They had recovered several of the islands we had captured, then carried the war into our own islands. Our forces had been decimated by yellow fever, and a major reinforcement was essential, if we were to recover the initiative.

Perhaps the most important of Spencer's problems was the choice of the expedition's naval commander. It was essential to select an admiral who would co-operate happily with the army commander. This had happened in the expedition sent to the West Indies at the outbreak of war, and was one reason for our initial success. Unfortunately such good relations were quite exceptional and inter-service ill-feeling had been growing steadily worse as the war progressed.

Relations were at their worst in the Mediterranean. Inter-service rivalry had hindered all operations in that theatre. The troubles were aggravated by the fact that almost every ship of the fleet carried a detachment of infantry, because there was a shortage of marines. There were frequent quarrels between the officers of these detachments and their naval messmates. Feelings ran so high that there had been several inter-service duels.

Matters came to a head when a Lieutenant Fitzgerald, in command of a detachment of the 11th Foot in H.M.S. *Diadem*, had a violent quarrel with her Commanding Officer, Captain Alymer. The soldier used such abusive language that Alymer felt compelled to report the matter to the Commander-in-Chief, Admiral Hotham.

Hotham seems to have done his best to smooth the matter over. He persuaded Alymer to withdraw his complaint if Fitzgerald apologized. This Fitzgerald refused to do, so Hotham was forced to order a court martial. The incident occurred whilst the fleet was at sea. As soon as he returned to harbour, Hotham reported what had happened to General Trigge, the army commander in Corsica. Trigge urged Hotham to cancel the court martial. Hotham replied that he had done all he could to avoid one, but Fitzgerald had proved too headstrong.

Fitzgerald, in the meantime, had written to Trigge to give his side of the story, beg for the general's protection and ask that any trial should be before an army court. Trigge, annoyed perhaps by Hotham's refusal to cancel the court martial, decided to give Fitzgerald the support he had asked for. Trigge told Fitzgerald to refuse to plead at his trial and to claim that a naval

court martial had no authority to try him. The court ignored this claim, found Fitzgerald guilty and sentenced him to be dismissed from the service. Trigge then announced that the court was improper and the sentence unprecedented, and ordered Fitzgerald to rejoin his regiment.

The dispute was then referred to the authorities at home. They felt compelled to support Hotham, and the King confirmed the sentence of the court. When he arrived in the United Kingom, Fitzgerald petitioned the Duke of York, as Commander-in-Chief, for a fresh trial before an army court. After consulting Spencer and the Judge Advocate General, the Duke turned down this request.

The passions roused by the case made it necessary to use exceptional care in choosing commanders, to ensure that they would co-operate. The army, as the prime mover of the expedition, named its commander first. Dundas chose Major General Abercromby. Spencer's choice was Rear-admiral Christian, a newly promoted flag officer, whose non-existent seniority seems to have been regarded as an advantage in his dealings with Abercromby. Another reason for his selection was that he had just left the Transport Board, where he had acquired experience that would be invaluable in preparing the expedition for sea.

There was one major difficulty about the selection of Christian, a difficulty that seems to have been overlooked when the selection was made. The West Indian theatre was divided into two independent naval commands; the eastern command was called the Leeward Isles, although it actually embraced the Windward Isles as well; the western was the Jamaican Station. Active campaigning by both land and sea was in progress in both commands, but the expedition was intended, primarily , for operations within the limits of the Leeward Isles. Abercromby would be the senior officer in this area, but the naval Commander-in-Chief, Admiral Sir John Laforey, was immensely senior to Christian.

The implications of Laforey's presence were not definitely resolved when Christian was chosen as the expedition's naval commander, but Dundas and Abercromby both got the impression that when the expedition reached the Leeward Isles, Laforey would transfer to the Jamaican Station and take command there. That would leave Abercromby free to work with Christian, without any risk of interference by a more senior naval officer. Christian, on the other hand, was told by Spencer that he would be under the over-all command of Laforey as Commander-in-Chief of the area.

There seems little doubt that Spencer was responsible for this muddle. He was later to deny having ever suggested that Laforey should leave his command, but on 25 August Spencer had written an Admiralty memorandum in which he said that when the expedition reached the West Indies,

Laforey was to embark in one of its battleships and 'proceed and take command on the Jamaica Station'. Some time after this Spencer saw Christian and told him to write to Laforey and tell him he would be coming under his command.

It is obvious that Spencer changed his mind and omitted to inform Dundas. Why this happened is not clear. We do, however, know that Middleton was absent through sickness, for some weeks about the time that Christian was selected to command the expedition. It seems likely that Spencer made the selection and decided on Laforey's transfer, and did not learn of the serious objections to this arrangement until Middleton returned to duty.

Whatever the explanation, Dundas did not hear about the change of plan until 11 October when he had a heated meeting with Spencer. The next day the two men exchanged letters. Spencer wrote 'I do not feel that it would be justifiable to supersede an Admiral so high on the list as Sir John Laforey without having a direct charge to produce against him, more especially in order to replace him by so very young a flag officer as Admiral Christian, who from his standing in the list of Admirals can certainly not be considered equal to a command of such extent'. Later in the letter he confessed that Christian was 'too young an Admiral for the command of so extensive an expedition'.

Dundas, in his letter, described himself as truly alarmed. He complained that he had, somehow or other, 'taken it so much for granted that Sir John Laforey was to go to St Domingo, that I do not believe that in the course of any conversation with Sir R. Abercromby I ever held out an idea or that he ever entertained a conception that in the *execution* of the service he would ever have any other person to call upon or any interference with anyone but Admiral Christian'.

The two men now tried to botch up a solution to the muddle. The expedient they decided upon was to leave Laforey in his command, but to order him to delegate full command over everything to do with the expedition to Christian. Spencer drafted instructions along these lines for Laforey, and Dundas then passed them on to Abercromby, with an explanation of what had happened.

The General's answer was petulant in tone, but not unreasonable. He began by confessing his surprise that 'a matter of so great importance to the public had remained so long undecided'. He went on to expose some of the weaknesses of the suggested command structure; asking what would happen if Christain were killed or disabled, or if Laforey refused to deploy the station ships, which were under his direct command, in support of Christian.

Dundas discussed these criticisms with the Prime Minister. Pitt, like everyone else who had just heard of the difficulties over the command, declared himself much alarmed. He gave orders that his approval was to be obtained before the final decision was made.

Spencer tried to answer Abercromby's objections in a letter to Dundas. The First Lord still maintained, despite his memorandum of 25 August, that there was no reason why Abercromby should ever have got the impression that Laforey was to be relieved. He explained, again, that 'had I supposed it necessary at the outset of this expedition that the Admiral who was to concert it with Sir Ralph Abercromby would supersede Sir John Laforey and become Commander-in-Chief in the West Indies, I should certainly not have proposed Admiral Christian for this situation'.

Spencer ended his letter by declaring that the dispute would have to be resolved by the Cabinet. This brought a prompt and sharp reply from Dundas, who told Spencer that in trying to shift the business to the Cabinet he was shirking his responsibilities and that it was up to him to settle the matter without further delay.

Faced with such an ultimatum, Spencer gave way to the War Office and agreed to Laforey's re-call. To get over the problem of Christian's lack of seniority, Spencer took refuge in another expedient, deciding to nominate Vice-Admiral Cornwallis as the new Commander-in-Chief; despite the fact that Cornwallis was serving in the Home Fleet and was about to sail on a mission that would keep him busy in home waters for at least 2 months.

This plan satisfied Spencer's political colleagues, and pleased the army, but caused immediate trouble at his own Board when he told its members what had been decided. Middleton, who had been opposing Laforey's re-call, took the news of it badly. He concluded a letter of protest by refusing to have any active share in the business and suggesting that, as the Admiralty had been bullied into its decision, the order for Laforey's re-call should be sent in the name of Dundas, as Secretary of State.

After being told by Dundas that he was evading his responsibilities, Spencer was in no mood to accept such advice from a subordinate. He ordered Middleton to sign the Board order for Laforey's re-call. Middleton replied that 'no consideration on earth will induce me to concur in what I think an unjust measure'. Told to sign or resign, he refused to remain at the Admiralty for another day.

His departure left Spencer without a naval adviser of the first rank. The other naval members of the Board were very junior flag officers, none of whom ever proved to be of marked ability. They lacked the reputation and personality to stand up to the First Lord when they disagreed with him.

This probably explains why Spencer found himself enmeshed in another serious crisis within a few days of Middleton's dismissal.

The Duke of York's regulations

Whilst Spencer was wrestling with the problem of the Leeward Isles command the Duke of York had been brooding over the troubles which had led to Fitzgerald's court martial. He wanted to prevent another incident of this kind occurring during the West Indian expedition, in which large numbers of soldiers would be embarked in ships-of-war either as marines or as passengers. After taking the advice of the Law Officers, he decided to issue new regulations to govern the discipline of army personnel whilst embarked in H.M. ships.

These regulations were issued to Abercromby the day before Middleton left the Admiralty. Copies were sent to Spencer. In view of the storm that followed, it is strange that they passed through the Admiralty without protest. It seems likely that, in the confusion caused by Middleton's sudden departure, Spencer handled the whole business himself, passing copies of the new Regulations on to Christian, without realizing what an inflammable matter it was.

Christian, the first naval officer to study the regulations in detail, appreciated their implications at once. Their main provisions deprived the Commanding Officer of a warship of all powers of punishment over any soldier of higher rank than full private. He was allowed to punish privates, but only if the Articles of War allowed summary punishment of sailors who committed a similar offence—and then only if the senior army officer on board agreed. In all other cases, the Commanding Officer's powers were reduced to remanding the offender, under arrest or confinement if necessary, for trial ashore by the military authorities.

This struck at the very roots of shipboard discipline. Christian was so alarmed, that he not only wrote a letter of protest to Spencer, he also sought the advice of the other Flag Officers at Portsmouth. They shared his alarm. Admiral Waldegrave, the future Lord Radstock, was the most senior officer. He took the lead, circulating copies of the new regulations and calling a Flag Officers' meeting to discuss them. Five admirals attended. A sixth, Cornwallis, was invited, but was weatherbound in his flagship at St Helens' Roads and unable to get ashore. He did, however, manage to get a letter ashore in which he said that 'no man living could feel more indignation upon the subject than himself'. When he wrote this he did not know of his selection as Laforey's relief.

After the meeting, Waldegrave wrote to Spencer. He stressed a point first made by Christian—that some distinction must be made between

troops carried for passage and troops acting as Marines. It would be intolerable for the latter not to be amenable to the full scope of normal naval discipline.

Spencer, who expressed surprise that the matter 'had been taken up in so decided a manner', accepted this argument. As a short-term measure he decided to relieve the infantry detachments in all the warships earmarked for the West Indies expedition, and to send Marines in their place. Similar arrangements were made for the ships of the Channel Fleet which were under sailing orders.

These measures did little to pacify the indignant officers at Portsmouth. Waldegrave held a second meeting, at which eight Flag Officers signed a protest in which they declared that the new Regulations, if enforced, would be the ruin of the Navy. They added that they considered the regulations to be illegal, as an unofficial amendment of an Act of Parliament.

Two days later, the captains at Portsmouth sent up a similar declaration —only one of them abstained from signing. The same day, Cornwallis, who still did not know how nearly the matter concerned him, wrote to the Admiralty to say that he would feel obliged to decline service whilst the new regulations remained in force. This drew a sharp reply from the Board, in which they told him that the regulations applied only to the ships being sent to the West Indies; and that, in any case, it was no concern of his because the infantry detachments in his ships were being relieved with Marines.

Cornwallis, who seems to have been fond of having the last word, was not subdued by this rebuke. He replied that the regulations, as drafted, had general application; he went on to ask why it was necessary to relieve his soldiers if they were not affected by the regulations. Shortly after sending this letter, the wind came favourable and he sailed from St Helens. This ended the argument.

The expedition sailed a few days after Cornwallis. The day after leaving Portsmouth it was struck by a gale of quite exceptional fury. The expedition was scattered, many ships were seriously damaged, several were sunk and over two hundred corpses were later washed ashore along Lyme Bay.

The expedition staggered back to Portsmouth to make good its losses. It sailed again on 9 December, and again met foul weather, though not of such severity. Christian struggled on against westerly winds for some weeks, but in the end he had to admit defeat. The expedition returned to Portsmouth for the second time on 26 January.

Spencer then decided to make changes. Cornwallis had returned and was available for new duties. Lord Hugh Seymour, one of the naval members of the Board, visited him at Portsmouth and told him that he was to

take naval command of the expedition and to become Commander-in-Chief Leward Isles when he reached the West Indies.

Cornwallis was unenthusiastic about this promotion. He wrote to Spencer to find out what had happened about the Duke of York's new regulations. The answer was that Spencer and the Duke, alarmed by the hornet's nest they had stirred up, had decided to kill off the regulations, but to do it in such a way that the navy would not be able to claim a triumph over the Army. The regulations had not, therefore, been withdrawn, but Abercromby had been told not to issue them to his subordinates.

Cornwallis learnt this during a visit to the Admiralty. He thought it a thoroughly unsatisfactory arrangement, and maintained that the regulations should have been re-called. As matters stood they could still be brought into force at the will of the Commander of the Land Forces. It was all very well for Spencer to give assurances that Abercromby would never do this; they were going on active service in an unhealthy climate, the land command might easily fall into less reasonable hands.

Spencer tried to reassure his admiral, but Cornwallis would not be appeased. He addressed a stream of complaints to the Admiralty. Some were valid and reasonable; but others were almost frivolous. He had every reason to complain about the condition of the ships, and the inefficiency of their captains; but it was a different matter to complain that his secretary was having difficulty in arranging a transfer, which would enable him to go to the West Indies.

Spencer showed great patience in dealing with these complaints, and in urging Cornwallis to get the long-delayed expedition to sea. It must have been almost the last straw when Cornwallis wrote on 26 February blandly declaring that 'I beg leave to observe that until last night I had received no intimation that there was any hurry to send me out' and announcing that the Flagship was due to be paid on 1 March and could not sail until this had been done.

Having made this last complaint, Cornwallis did what he could to speed the payment, with the result that the expedition sailed on 29 February. It met foul weather for the third time, running into a gale in which Cornwallis' flagship, *Royal Sovereign*, had a collision with a transport. The two ships remained entangled for over an hour. It was several days before the weather moderated sufficiently for *Royal Sovereign*'s injuries to be thoroughly examined from a boat. The inspection showed that she was in urgent need of repairs, which would be beyond the scope of any West Indian dockyard.

The expedition was now off Cape Finisterre and the only ships of the line still in company were destined for the Jamaica Station. In these circumstances, Cornwallis decided to turn over the command to the senior

captain, and to return, in his flagship, to Portsmouth. He reached there on 14 March.

When he reported his return, the Board replied with a critical letter, which suggested that he should have transferred to another ship, and which ended with a peremptory order to shift his flag to the frigate *Astrea* and sail at once for Barbados. The same post brought two private letters from Spencer. In one he made his personal comments on Cornwallis' return, they followed the line of the official Board letter, but were in a more friendly tone. Spencer's other letter told Cornwallis that he had been made Rear-admiral of Great Britain–a promotion decided on before his return, which was soon to prove one of life's little ironies.

Cornwallis answered all these letters. His official reply: ended: 'I beg, Sir, that you will be pleased to state to Their Lordships my readiness to proceed in the *Royal Sovereign* the moment her defects are made good—if that should meet with Their Lordships' approbation. But the very precarious state of my health obliges me to decline going out in a small frigate, a stranger to every person on board, without accommodation or any comfort whatever.'

He again heard from both Spencer and the Board. This time it was the Board which took the milder line, merely noting his remarks and instructing him to remain in *Royal Sovereign* until further orders. Spencer's letter was curt and angry. Cornwallis was informed that his conduct had made it impossible to continue him in employment. Two days later Cornwallis received an official letter telling him he was to be court martialled.

The court assembled at Portsmouth on Monday, 4 April. It was a most august body. Lord Howe, the most distinguished living naval officer, was supported, as President, by nine other Flag Officers and by three senior captains. Cornwallis had to face three charges. Reduced to the simplest terms, they were:

> Returning to Portsmouth without orders.
> Not shifting his flag to another ship.
> Disobeying the order to proceed in *Astrea*.

Cornwallis took the precaution of employing counsel. He was defended by Henry Erskine, a future Lord Chancellor. The first two charges were matters of personal judgement, so the defence against them was based on explanation of the circumstances, and of Cornwallis' reasons for his decision.

The third charge was, of course, the most serious one. Cornwallis' defence was ingenious. He pleaded that the Admiralty's instruction to

proceed in the *Astrea* was an order of the type which officers were entitled, and indeed expected, to query, if they considered that higher authority was not in full possession of all relevant facts. In this case, his health was so poor that, if he had sailed in the *Astrea*, he would have reached the West Indies unfit to exercise command. To have obeyed the Admiralty order would, therefore, have been to defeat its purpose, and he had felt it his duty to represent the fact. He suggested that the Admiralty's cancellation of its order supported this argument; but maintained that if the order had been repeated he would have obeyed it.

The court found Cornwallis guilty of errors of judgement, not deserving punishment, on the first and second charges. They found him Not Guilty on the all-important third charge.

Cornwallis was, one feels, lucky. The letter in which he refused to sail in the *Astrea* was presented as evidence. It is not easy to read the meaning he suggested in court into the phrasing he actually used. The court was, however, prejudiced in his favour. They knew that he had played a leading part in the resistance to the Duke of York's regulations. Many of them thought that this was the real reason for his prosecution.

The Admiralty, frustrated by the court, changed its tactics. Ten days after his trial, Cornwallis received orders to strike his flag and come onshore. Some months later he wrote to the Admiralty to offer his services, but he was not employed again until Spencer had left the Admiralty.

With Cornwallis' dismissal, Spencer had driven four admirals into retirement and deprived the navy of able leaders who could ill be spared. The weak behaviour of his Board over the Duke of York's regulations had shaken officers' confidence in the Admiralty. The officers' resistance had shown the lower deck how to bring collective pressure to bear on authority, an example that was remembered by the mutineers of 1797.

The mutinies lay in the future. After they had been quelled, Spencer's natural abilities began to pay dividends. He had gained the experience needed to represent the Navy with proper authority in cabinet and he made a marked success of his later years in office; but the period in which he was learning his duties must be accounted a difficult time for the Royal Navy.

LABOUR RELATIONS IN THE ROYAL DOCKYARDS IN 1739

By B. McL. Ranft

HISTORIANS from the Webbs onwards have postulated the existence of workmen's combinations in the early part of the eighteenth century but have bewailed the scarcity of evidence relating to them.[1] It is surprising, therefore, that little attention has been paid to the development of labour relations in the royal dockyards whose nature particularly lent itself to combination, of which there is abundant evidence in the official records. The large number of men employed in six establishments all under the same employer, the lagging pay typical of government departments at the time and the fluctuations of employment policy dictated by changing demands for defence, all combined to make the dockyards a uniquely favourable breeding ground for organized protests against inadequate pay and unsatisfactory conditions. The major operations in shipbuilding and repairing were carried out by the highly skilled shipwrights who formed the largest element in the labour force, and who, as the Navy increased in size during the early eighteenth century, became permanent Admiralty employees, settling in the dockyard towns in the expectation of life-long employment for themselves and of apprenticeships for their sons.[2] Even so, the demands of war were bound to cause fluctuations in the labour force, and these, combined with the friction inevitable in large organizations under war-time pressure, especially when they were headed by Commissioners used to naval discipline were bound to arouse grievances and discontent. In the late seventeenth century such discontents gave rise not only to petitions to the Admiralty but also to strikes which the authorities regarded as mutinies. These were ill-organized and did not gain the men much satisfaction,[3] but as the permanence of the main part of the labour force increased, so did the possibility of more efficient workmen's organization, and the Admiralty's administrative correspondence for 1739 shows how far this had developed.

1 For example, A. Aspinall, *The Early English Trade Unions* (1949).

2 N. McLeod, *The Shipwrights of the Royal Dockyards*. (*M.M.* (1925), Vol. xi, pp. 283, 284.

3 John Ehrman, *The Navy in the War of William III*, pp. 89–8, 619. (Cambridge, 1953.) D. C. Coleman, *Naval Dockyards under the later Stuarts*. *Econ. Hist. Rev.*, Vol. v, p. 144.

Table 1[1]. *Numbers and types of workmen employed in the Royal Dockyards in June and December 1739*

	14 June 1739							14 November 1739							
	Deptford	Woolwich	Chatham	Sheerness	Portsmouth	Plymouth	Total	Deptford	Woolwich	Chatham	Sheerness	Portsmouth	Plymouth	Total	Chi
Shipwrights	410	350	570	100	597	263	2290	490	411	590	96	643	297	2527	+
Quarterboys	8	6	11	3	15	4	47	18	10	11	3	14	4	60	+
Caulkers	27	20	97	13	91	35	283	44	21	99	13	91	35	303	+
Oakum boys	9	7	32	4	29	12	93	14	9	33	4	29	12	101	+
Joiners	34	41	52	5	58	22	212	34	44	62	5	68	24	237	+
House carpenters	48	20	100	27	96	31	322	48	20	100	28	99	33	328	+
Wheelwrights	2	1	1	—	1	1	6	2	1	1	—	2	—	6	
Plumbers	1	1	2	—	1	1	6	1	1	2	—	1	1	6	
Pitch Heaters	1	1	2	1	2	1	8	1	1	2	1	2	1	8	
Bricklayers	23	6	20	7	23	17	96	23	6	20	4	23	18	94	+
Bricklayers labourers	39	5	21	8	16	—	89	39	5	20	4	16	—	84	+
Sailmakers	19	18	28	11	25	20	121	33	23	33	12	26	22	149	+
Scavelmen[2]	31	21	49	20	80	12	231	41	22	70	20	80	12	245	+
Riggers	14	20	32	11	42	20	139	35	30	32	19	42	20	178	+
Riggers labourers	—	—	26	12	10	—	48	2	4	26	20	10	20	82	+
Labourers	130	99	108	14	175	102	628	170	100	148	14	309	119	860	+
Blockmakers	2	1	2	1	2	1	9	2	1	2	1	4	3	13	+
Braziers	1	—	2	—	1	—	4	1	—	2	—	1	—	4	
Locksmiths	3	1	2	—	2	1	9	3	1	2	—	2	1	9	
Teams	4	3	10	2	11	5	35	4	3	10	2	13	6	38	+
Sawyers	45	26	33	9	66	22	201	45	26	33	9	66	22	201	
Treenailmooters[3]	2	—	2	—	—	1	5	2	—	2	—	—	1	5	
Oarmakers	1	—	—	—	—	1	2	1	—	—	—	—	1	2	
Coopers	—	—	1	—	—	—	1	—	—	1	—	—	—	1	
Masons	—	—	—	—	25	4	29	—	—	—	—	25	5	30	+
Paviours	1	—	—	—	—	—	1	1	—	—	—	—	—	1	
Limeburners	—	—	—	—	1	—	1	—	—	—	—	1	—	1	
Watermen	1	1	—	—	—	—	2	1	1	—	—	—	—	2	
Armourers	—	—	—	—	—	—	0	—	—	—	—	—	—	0	
Smiths	37	27	45	10	52	35	206	40	29	45	9	58	38	219	+
Compassmakers	2	—	—	—	—	—	2	2	—	—	—	—	—	2	
Ropeyard															
Foremen	—	1	—	—	1	1	3	—	1	—	—	1	1	3	
Spinners	—	75	83	—	78	44	280	—	84	94	—	83	48	309	+
Hatchellors[4]	—	11	15	—	12	6	44	—	12	16	—	12	6	46	+
Winders up	—	6	—	—	8	4	18	—	6	—	—	8	4	18	
Labourers	—	7	16	—	7	4	34	—	7	17	—	8	4	36	+
Boys	—	3	3	—	3	2	11	—	3	3	—	3	2	11	
Totals	895	778	1365	258	1531	672	5499	1097	882	1476	264	1740	760	6219	+7

1 Based on P.R.O. ADM/49/159.
2 Scavelmen were labourers particularly concerned with cleaning and pumping out the docks.
3 Treenailmooters made the treenails, the circular wooden pins which secured the planking and timbers of ships.
4 Hatchellors combed and prepared hemp for rope-making.

Table 1 shows the numbers and types of workmen employed in 1739, and Table 2 the daily rates of pay of the main types. These rates, with the exception of the smiths', had been established in the late seventeenth century and were to remain unchanged until 1788, when they were replaced by task and job rates. Earnings varied greatly, according to the amount

Table 1 A. *Variations in the numbers of shipwrights employed in the Royal Dockyards between June and November 1739*[1]

	Deptford	Woolwich	Chatham	Sheerness	Portsmouth	Plymouth	Total	Variation
14 June	410	350	570	100	597	263	2290	—
14 July	445	363	560	98	597	261	2332	+ 42
14 Aug.	489	409	572	98	602	270	2440	+108
14 Sept.	490	409	573	98	630	285	2485	+ 45
14 Oct.	490	416	579	96	636	287	2504	+ 19
14 Nov.	490	411	590	96	643	297	2527	+ 23
								+237

1 Based on P.R.O. Adm./49/159.

Table 2. *Daily rates of pay of the main types of workmen employed in the Royal Dockyards*

Shipwrights (from Dec. 1690)

Master mast maker	3*s.* 0*d.*
Master boat builder	3*s.* 0*d.*
Foremen	3*s.* 0*d.*
Quartermen	2*s.* 6*d.*
Workmen	2*s.* 1*d.*
Servants	1*s.* 2*d.* to 2*s.* 0*d.*

Joiners (from Jan. 1693/4)

Master joiner	2*s.* 6*d.*
Workmen	2*s.* 0*d.*
Servants	1*s.* 0*d.* to 1*s.* 9*s.*

Sail makers (from Jan. 1693/4)

Master	3*s.* 0*d.*
Workmen	1*s.* 10*d.*
Servants	1*s.* 1*d.* to 1*s.* 8*d.*

Scavelmen (from Jan. 1696/7)

Foremen	1*s.* 6*d.*
Workmen	1*s.* 3*d.* to 1*s.* 6*d.*

Smiths (from Oct. 1726)

Foremen 1st Class	2*s.* 6*d.*
Foremen 2nd Class	2*s.* 2*d.*
Foremen 3rd Class	1*s.* 10*d.*
Hammermen	1*s.* 8*d.*

Caulkers (from Jan. 1693/4)

Foremen	3*s.* 0*d.*
Quartermen	2*s.* 6*d.*
Workmen	2*s.* 1*d.*
Servants	1*s.* 2*d.* to 2*s.* 0*d.*

House carpenters (from Jan. 1696/7)

Master	2*s.* 6*d.*
Foremen	1*s.* 11*d.*
Workmen	1*s.* 10*d.*
Servants	1*s.* 0*d.* to 1*s.* 9*d*

Riggers (from Jan. 1693/4)

Foremen	2*s.* 0*d.*
Workmen	1*s.* 6*d.*
Labourers	1*s.* 4*d.*

Labourers (from Dec. 1690)

Foremen	1*s.* 6*d.*
Workmen	1*s.* 1*d.* to 1*s.* 2*d.*

In addition, shipwrights, caulkers, joiners, house carpenters and sailmakers and smiths were paid a lodging allowance of 2½*d.* a week.

1 Based on Admiralty Library, *Corbett's Precedents*, Vol. XVIII; and on *The Sixth Report of the Commissioners of Naval Enquiry, 1804.*

Table 3.[1] *Examples of amounts of time worked and earnings in* 1739

Type of workman	Time worked: Days	Nights	Tides	Earnings: £	s.	d.	Time worked: Days	Nights	Tides	Earnings: £	s.	d.
	1 Jan.–31 Mar.						1 Apr.–30 June					
Shipwright	77	—	34	9	1	0	77	—	62	9	19	2
				L.	2	8				L.	2	8
Caulker	77	2	21	8	17	8	77	2	58	10	0	10
				L.	2	8				L.	2	8
Joiner	77	—	12	8	1	6	76½	—	44	9	0	6
				L.	2	8				L.	2	8
House carpenter	76½	—	—	7	0	3	76½	—	87	9	3	9
				L.	2	8				L.	2	8
Sail maker	75½	—	—	6	18	5	71	—	5	6	12	8
				L.	2	7				L.	2	5
Rigger	74	—	—	5	11	0	76	1	36	6	7	6
Scavelman	76	1	4	6	16	10	77	2	22	6	5	10
Labourer	75	—	31	4	11	7	77	—	24	4	11	5
	Days	¼ days (on anchor work)	Hours				Days	¼ days (on anchor work)	Hours			
Smith	70	24	154	8	5	2	69½	59	—	7	0	5
				L.	2	5				L.	2	4
	Time worked: Days	Nights	Tides	Earnings: £	s.	d.	Time worked: Days	Nights	Tides	Earnings: £	s.	d.
	1 July–30 Sept.						1 Oct.–31 Dec.					
Shipwright	77½	2½	111	11	16	0	79	9	142	13	12	1
				L.	2	8				L.	2	8
Caulker	78	1	121	12	0	2	78½	2	119	12	2	1
				L.	2	8				L.	2	8
Joiner	78	2	108	11	7	6	79	—	144	12	8	0
				L.	2	8				L.	2	8
House carpenter	77½	—	108	9	16	1	77½	—	32	7	18	1
				L.	2	8				L.	2	8
Sailmaker	71½	—	94	8	18	1	77½	8	116	11	14	9
				L.	2	5				L.	2	8
Rigger	76	1	138	8	1	6	75	1	15	5	19	0
Scavelman	78	—	66	6	19	0	77½	2½	17	6	5	8
Labourer	78	—	26	4	13	2	77	—	10	4	6	9
	Days	¼ days (on anchor work)	Hours				Days	¼ days (on anchor work)	Hours			
Smith	69	59	—	6	19	7	70½	65	—	7	15	3
				L.	2	4				L.	2	5

1 From Yard Paybooks P.R.O. ADM/42/1257. L. = Lodging.

of overtime or 'extra' worked, and grievances about this constantly appeared in the workmen's petitions. Examples of the amount of overtime worked and of earnings are given in Table 3. Rates of pay and hours of work were virtually the same in all Yards, and the details of the latter noted by Thomas Corbett, secretary to the Admiralty, in 1722 were substantially the same in 1804.[1] From March to October there was a 12-hour working day from 6 a.m. to 6 p.m. In the winter, work was from daylight to dusk. In summer $\frac{1}{2}$ hour was allowed for breakfast and $1\frac{1}{2}$ hours for dinner. In winter there was no time for breakfast and only 1 hour for dinner; there were slight variations between the Yards and between the various types of workmen for these mealtimes. Overtime was paid at the rate of an extra day's pay for a 'night' of 5 hr., or of just under a third of a day's pay for a 'tide' of $1\frac{1}{2}$ hours (e.g. 8*d.* for shipwrights and 4*d.* for labourers). In the war-time rushes of the eighteenth century, two tides of 3 hours extra were regularly worked.[2]

The workmen's pay was supplemented by two important allowances. Lodging allowance of $2\frac{1}{2}$*d.* per week was paid to the major classes of skilled men. This had originated in the early seventeenth century when there was a large floating element in the labour force, but continued after they became permanent employees. Much more important was the privilege of taking 'Chips' out of the Yard, a lucrative and much abused perquisite which the authorities were always trying to control. The legitimate practice was for each man to take out of the Yard a bundle of the small pieces of wood cut off during his day's work, and of no use in the Yard. Every contemporary account of the Yards from the seventeenth century until the abolition of the privilege in 1801 dwells on the great losses caused by its constant abuse. It was common for large pieces of timber to be cut up solely to provide chips and for the workmen to claim the right to carry their bundles out of the Yard unexamined and on their shoulders, instead of accepting the authorities' requirement that they should be carried under their arm and untied, to facilitate inspection. In this way the men could steal not only large pieces of timber but also other valuable materials such as copper and brass. When the privilege was abolished, a money payment was made in lieu which ranged from 6*d.* a day for shipwrights to 3*d.* for labourers.[3]

The political and naval situation in the summer of 1739 put a great strain on the Yards. In May the fleet consisted of 124 ships of the line and 50-gun

1 Admiralty Library, *Corbett's Precedents*, Vol. XVIII, f. 254. *Sixth Report of the Commissioners of Naval Enquiry, 1804*, pp. 9–10.

2 H. E. Richardson, Wages of the Shipwrights in the Royal Dockyards, 1496–1788, (*M.M.* (1947), Vol. XXXIII, pp. 264–74.

3 *Sixth Report of the Commission appointed under 25 Geo III, cap. 19 to enquire into Fees, Gratuities etc. in the several Public Offices, 1806*, p. 316.

ships, in addition to frigates and smaller craft; 44 of the larger ships were completely unfit for service and only 35 of the remaining 80 were in sea pay. In July and August the Government instituted the naval preliminaries to Britains' declaration of war against Spain, by sending squadrons to the Mediterranean and the West Indies.[1] This and the necessity to strengthen naval forces generally, in view of the possibility of war with France as well as Spain, put a great strain on the dockyards' resources of skilled manpower, especially shipwrights, and temporary extra labour had to be rapidly recruited. The numbers of skilled shipwrights in the country was limited, and the Navy found itself competing with private employers who were more easily able to pay higher wages. In addition, it was sometimes necessary to transfer men from one Yard to another.[2] The knowledge that their labour was now at a premium, but that some of them were bound to be discharged when the emergency was over, and the strains consequent on the requirement for a large amount of overtime led to a succession of strikes and petitions over pay and conditions of employment. The Admiralty were particularly concerned with the evidence which emerged of a high degree of co-operation between the men of the various Yards, and though they regarded the strikes as mutinies, the circumstances were such that they had on one occasion to make considerable concessions to the men in order to get the ships ready for sea.

Work at Chatham dockyard was brought to a standstill on 28 August by a shipwrights' strike over the fining and discharge of some of their number for alleged laziness in fitting out the *Nassau*.[3] Two hundred and twenty-two shipwrights took the lead by refusing to work until the demands of a petition presented to the Commissioner, Thomas Mathews, were granted in full. This document shows that the incident over the *Nassau* was a culmination of a series of general grievances, in which the voice of an early radicalism can be heard. 'There is not a man amongst us who would not freely die for our King and Country, but we will not tamely suffer ourselves to be made slaves to any particular man's whim, for we are free-born subjects.' They had been antagonized by the authorities' recent attempts to check the amount of chips being taken out of the Yard, and resented the fact that the rush of work was depriving them of their dinner break. Overtime was not being fairly allocated and, in particular, the

1 Sir Herbert Richmond, *The Navy in the War of 1739–48*, Vol. 1, pp. 14, 261–4. (Cambridge, 1920), B. McL. Ranft, The Vernon Papers, *Navy Records Society* (1958), pp. 2, 3.

2 National Maritime Museum MSS. Chatham Dockyard, CHA/E/5, Aug. 1739. National Maritime Museum MSS. Navy Board–Admiralty Correspondence. National Maritime Museum MSS. ADM/B III, Jan. 1739/40, 113, Sept. 1740.

3 The documents about this strike will be found in National Maritime Museum MSS. ADM/B 110, 25 Aug.–1 Sept. 1739 and CHA/E/5, 1 Aug.–19 Sept. 1739.

older men who had spent their lives in the Yard were not being given a fair share. Arbitrary finings, of which the recent one was a glaring example, were frequent, and they would not return to work until justice was done: 'For when those that are to do Justice act unjustly, if not timely retrieved, Liberty will soon die, for Justice is the prop of Liberty, which is all true Englishmens' lives and souls'.

On the 29th the strikers, showing tendencies to drunkenness and violence, assembled at the gates and would not let anyone leave or enter the Yard, and refused to disperse when a J.P. read the proclamation against riotous assemblies. Mathews, whose conduct at the batter of Toulon was not to demonstrate qualities of imagination or mental flexibility, now appealed to his superiors, the Navy Board, for help in suppressing the strike. The Board replied cautiously and constructively that they were doubtful of the justification for the recent fines and that the first priority was to get the men back to work. The ships had to be got to sea and 'workmen are difficult to be had on any terms' and therefore concessions must be made. If necessary, the fines and discharges were to be cancelled and the men allowed to take out their chips on their shoulders as they demanded. On the other hand, Mathews was to identify the ringleaders and dismiss them when the pressure of work had eased off. Mathews was appalled by these concessions which he thought would be the end of all discipline in the Yard, and urged the Board to come and deal with the situation themselves. He reported that the men at the gate were becoming more threatening and effectively keeping out even those who were prepared to work. Four members of the Board went to Chatham and began to negotiate with the leaders of the strike at 10 p.m. on 30 August. After they had examined both them and the officers of the Yard, the Board decided that the fines over the *Nassau* were unjustified and ordered them to be lifted and the discharged men reinstated. The men however would not return to work until the Board had accepted their demands about the method of taking out chips and had agreed to interview the older men personally and to ensure that those who were fit would have their fair share of overtime. The men conducted their negotiations with the Board firmly but responsibly and took pains to point out that many of them were householders and Freemen of Rochester. On 1 September, the men returned willingly to work, but there was no non-victimization clause in the settlement, and on the 19th three men alleged to be ringleaders, were discharged and ordered not to be employed again in any of the Royal Yards.

It would seem that the news of the success of the shipwrights' strike at Chatham spread and was, in the opinion of the officers of the Yard at Woolwich, mainly responsible for the strike which broke out there on

31 October, when virtually the whole labour force assembled riotously at the gate and refused to return to work until the terms of a petition which they had already sent to the Admiralty were granted.[1] These were similar to those at Chatham, with an emphasis on increased overtime pay. Old men should be given their fair share of overtime and all young men who had completed their 7 years apprenticeship should be taken on as shipwrights, unless proved guilty of some misdemeanour. If the men worked on Sunday they should have double pay and if they worked afloat at dinner-time they should be paid for an extra half tide. When employed in shutting the dock gates after 6 p.m. they should have an extra two tides if they finished earlier than the time laid down. They also demanded a whole instead of a half-day on the four State Holidays, to be allowed to carry out their chips according to ancient custom, and to have protections against the Press Gange for 30 days instead of only for 4.

There was no resident Commissioner at Woolwich and the Navy Board who were in direct charge for it reacted firmly and instructed the officers of the Yard not to pay the men on 1 November unless they had returned to work. As payment was always at least a quarter in arrears, this was a potent threat and shows that the strike was badly timed. The Board believed that the bulk of the men would willingly return to work were it not for the threats of a violent few, whom it urged the officers to identify. The Admiralty was even more determined to break the strike, probably because the immediate rush of getting ships to sea was now over and because Woolwich was less heavily employed than Chatham at this time, and on 1 November ordered three members of the Navy Board to go to deal with the situation, promising them military aid if it were needed. On 2 November only six shipwrights and seventeen other workmen reported for duty, the remainder assembled outside the gate and refused to obey a local J.P.'s order to disperse, until all their demands had been granted. Their spokesmen claimed 'That Deptford and Chatham Yards were at their command at the least notice if their grievances were not redressed' and that 'Fifty or sixty men are gone to Deptford this morning from hence to engage the workmen of that Yard to join them'. There is no evidence in the official records of this delegation having had any success. On 3 November the three members of the Board, having failed to persuade the men to return, examined the Yard Officers on the terms of the petition. Their general reply was that none of the demands were justified by any precedents within the memory of the master shipwright who had served 32 years in the Yard, and that no recent events justified the strike. Some men had been prevented from taking away

1 The relevant documents are in National Maritime Museum MSS. ADM/B/110, 31 Oct.–3 December 1739; and ADM/A/2277, 2 Nov.–4 Dec. 1739.

as chips some large chocks and pieces of timber, but this by itself would not have brought the men out had it not been for trouble-makers among those recently engaged and the fact 'That some of the people of the Yard, they believe, have had a correspondence with the people of the Chatham Yard, at and since the late mutiny'.

The strikers were still firm on the 4th and attempted to win over the Navy Board by a new petition couched in flattering terms.

'The motive that induces our whole company to believe that we shall be forgiven is that we are in good hopes that Your Honours' goodness is still greater than our fault. Further we must beg leave to acquaint Your Honours that this will be of very great service to his Majesty and the Government in getting shipwrights entered in their service in such times as these. We all leave this to your serious consideration and hope that Your Honours will condescend to grant this and all the others mentioned in our petition; then we who are willing to serve His Majesty even to the very Antipodes, shall always and ever be bound in duty to pray for Your Honours' prosperity and welfare on this Terrestrial Globe, and for your eternal happiness in the Celestial Heaven.'

That this pious intention was not softening their present militancy is shown by the curtly worded postscript which follows immediately: 'One thing that has been omitted from all this is that our whole company insists on our having our wages for the time we have stood out.'

The Navy Board was now showing signs of conciliation and rescinded the dismissal of nine men who had been identified as ringleaders. The Admiralty however were determined to break the strike and on the 5th ordered the Board to return to Woolwich with a proclamation declaring the petition unreasonable and contrary to the practice of Woolwich and all the other Yards. Men who did not now return to work would be punished as deserters or rioters, and troops were to be sent to over-awe the strikers. The men now began to waver, the older ones favouring a return to work and on 7 November they began to trickle back. By the 12th only thirty-six men were absent and on the following day all but three were accounted for. They were posted as deserters and the strike was over.

The most detailed evidence of a high degree of co-operation between workmen from all the naval Yards is found in the documents concerning the demands initiated jointly by the smiths at Woolwich and Deptford at the time of the shipwrights' strike at Woolwich.[1] The smiths did not strike but put their faith in co-ordinated written protests about their hours and pay. The original joint petition from Woolwich and Deptford begins by assuring the Admiralty that the smiths are not going to follow the evil example of other artificers by striking when their country were most in need of their services; but as others are pressing their grievances and have had redress

1 National Maritime Museum MSS, ADM/A/2277, 3–13 Nov. 1739; ADM/B/112, 18 July 1740; ADM/A/2285, 19 July 1740.

(presumably the Chatham shipwrights), they cannot refrain from pressing theirs. The chief of these were that, whereas the other workmen had shorter hours in winter, the smiths worked from 6 a.m. to 6 p.m. all the year round; they were given no time for meals and their rate of overtime is so low: 'That an oakum boy's or labourer's extra pay (to whom we humbly apprehend we are not inferior) is better.' To remedy all this they demand double pay for Sunday work and either to have extra pay for the additional hours they work in the winter or else to work the shorter hours of the other men. The examples of earnings in Table 3 suggest that the comparison with the labourers' extra pay was unjustified, but also show that the smiths were the worst paid of all the skilled workers.

The smiths at Deptford and Woolwich followed up their petition by a series of letters to their fellows in the other Yards. Writing to Sheerness on 3 November they said they had chosen the time of the shipwrights' strike to present their own demands in the hope that they will have the better success on that account. On the 8th they told their 'brother workmen and sufferers' at Plymouth that their petition had been given a kind reception and that the Navy Board had made encouraging promises. The Board was about to circularize all the Yards to find out if the grievances of their petition were universal and the Plymouth men were urged to harmonize their demands with those already put forward by Deptford and Woolwich. This correspondence shows that transfers from one Yard to another with the personal contacts which ensued, was an important factor in the smiths' solidarity. The Plymouth men promised their full co-operation.

In a warrant of 7 November the Navy Board ordered all the Yards to report on the validity of the smiths' petition, and the consequent replies from the Yards give a full picture of their conditions of work. At Sheerness they did work a 12-hour day all the year round, although on Saturdays they finished at 5 p.m. like the shipwrights. They have no allotted dinner time but are expected to eat between 'heats'. When they work more than 12 hours they are paid at an hourly rate proportionate to their daily pay. The Chatham reply contains the additional information that work on Sundays and normal holidays was paid at the normal daily rate, but that work on the afternoon of the four State Holidays earned an extra half day's pay; since 1723 the smiths had had extra pay and beer for anchor work and from 1728 they have also had lodging allowance. The reply from Portsmouth shows one slight variation. There the master smith allowed the men half an hour for dinner. It also contains details of overtime pay. A night's extra work is paid at the rate of a day's pay for 10 hours extra work and proportionately for a lesser number of hours. Extra pay for anchor work ranged from 10*d.* for 2 hours for the master smith and first foreman to 6*d.* for the hammermen.

These rates compare unfavourably with those of the shipwrights who were given an extra day's pay for a 'night' of only 5 hours, and in itself shows that the smiths had good ground for complaint.

The Navy Board at this time was normally very quick in its working and it is therefore surprising that this matter is not mentioned again in the official correspondence until July 1740, when on the 18th it reported to the Admiralty on its investigations of the smiths' complaints. It had found them well-founded on the whole and recommended that relief should be granted. The lower rates for extra work dated from time immemorial when the smiths' work had been put out to contract, and had been continued by Navy Board warrant when the smiths had become Yard employees in 1723. An exception had then been made for anchor work where 2 hours extra was to earn a quarter of a day's pay. It is now felt, that in recognition of the hardness of the work, and because of the higher rates paid to the other workmen, that the smiths should have the anchor rates for all extra work.

The smiths' orderly protests and solidarity had won them something but they were still worse off than the other skilled workmen. They had to work 8 extra hours for an additional day's pay as compared with the 5 hours of the other men, and their other complaints were not met at all. It would seem that only when, as at the Chatham strike, militant action was timed to coincide with the Admiralty's being under great pressure to get ships to sea, could the workmen of the Royal Dockyards have a reasonable expectation of gaining their demands.

NOTES

SOME NAVAL PROBLEMS OF SCILLY IN NAPOLEONIC TIMES

'In time of war' wrote Borlase in 1756, 'it is of the utmost importance to England to have Scilly in its possession... when a rival nation has a mind to annoy our trade and put a curb in our mouths it will take hold of Scilly.'[1] In this he echoed not only the earlier naval opinions of Ayscue and Pepys[2] but also the repeated warnings of the Godolphin Governors of Scilly (which appear scattered through the State Papers of the sixteenth and seventeenth centuries) that Spaniard, Dutchman and Frenchman took an unwelcome interest in the islands. The importance of the garrison there is indicated by the allowance granted, but that this did not always reach its destination for either wages or repairs is again indicated by frequent wails from the current Godolphin, obliged to dip into his own pocket and occasional petitions from officers stationed there.[3]

1 *Observations on the Ancient and Present State of the Isles of Scilly*, by W. Borlase, M.A., F.R.S. (Oxford: W. Jackson).

2 N.R.S., *Spencer Papers*, p. 161.

3 Cal. Treasury Books, 5 June 1668.

While naval neglect might, in part, be attributed to fear of the dangerous approaches to the rock encircled islands[1] pin-pointed by the 1707 disaster when Sir Cloudesly Shovel was wrecked on the Gilstone,[2] Pepys put his finger unerringly on the prime cause of ignorance when he said[3] that the cartographers were so bad it was hardly safe to station ships there.[4]

It was to remedy this deficiency in face of rising French danger that Graham Spence, assistant surveyor to the Admiralty, was sent to Scilly, where he spent 3 long years. 'Scilly is famous for nothing that I know but shipwrecks' he remarked gloomily. His admirable report published in 1790–92[5] shows very clearly the lack of information existing before. Spence gives for the first time complete tide tables, detailed sailing directions and lists and places all rocks and shoals[6] some of which he discovered and named.[7] Above all, he pointed out the need for absolute accuracy when nearing the islands: 'Fatal accidents may happen taking the strong tides of Scilly half or even quarter of a point on the wrong bow. Soundings cannot be depended upon in thick weather (since the depth could be 40 fathoms close in). Tides run longer and stronger in the northerly than southerly direction... do not take it for granted that Scilly is accurately laid down on the chart... keep well South... or you may find yourself in the fatal parallel.... Trusting to soundings is mere delusion.' Nevertheless, Spence observes severely that since there was now a revolving light on St Agnes Scilly is only dangerous in thick weather; otherwise 'a mariner can be cast away only on purpose or through neglect or ignorance'. Scilly, he concludes 'is dreaded because it is not generally known. The largest fleets may anchor in the Roads and lie as safe as anywhere west of Spithead. Those very rocks so terrible for a stranger to behold are shelter and refuge from the stormy waves. Providence has placed Scilly as the asylum rather than the grave of mariners. It saves more than it destroys.'

One further hazard to ships mentioned by Spence, was the ill-payment of pilots. The 'Islanders generally keep a most excellent look out for vessels.... The sea being their natural element they are daring and venturesome... few seafaring people run such hazard of their lives as they do in open sprit-sal boats... they often perish in them 6 or 8 men at a time. I believe there are more widows and fatherless children here than anywhere else... the Scilly pilots are so badly paid they have no encouragement to be careful or clever and they run the greatest risks for a mere trifle, often less than 2/6. Some also pretend to be pilots though they only know the rocks of their own isle and ten to one they run the vessel ashore.'

With Spence's report in hand, the Admiralty was able to consider the use of Scilly from two angles: first, as the only western port from which ships could sail with any wind and secondly as a squadron depot for the French war. (It is sometimes not realized that Scilly is equidistant from

1 Cosimo III, Grand Duke of Tuscany, who spent a few days on the islands perforce in 1669 later wrote that the islands caused more wrecks than the whole of Europe. (*Travels through England*, trans. Ital. MSS in the Laurentian Lib. Florence, London, 1821.)

2 Addison writing in the contemporary *Spectator*, Vol. 1, no. 26, blamed the admiral rather than the islands who 'made an unfortunate end being cast away upon certain rocks of Scilly at night and all the ship's company between 8 and 9 hundred officers gentlemen and seamen were drowned besides two other ships which were lost with their companies and some other ships whose companies were saved. It was unhappy for an admiral... to die by an error in his profession from which it was impossible for him to reap any honour.'

3 N.R.S., *Tangiers Papers*, Vol. 73.

4 N.R.S., *Narborough Journal*, 22 May 1673, Vol. 86. Captain Narborough who was nearly wrecked off Scilly in the *Fairfax* complained that the islands were further south than charted; soundings were very deceptive and the tide currents set constantly northwards.

5 *A Geographical and Nautical Description of Scilly*. (See Greenwich Museum.)

6 He listed 43 grass bearing rocks; 227 uncovered; 1500 covered at high tide and innumerable always covered.

7 A process not yet probably complete. The *Sereca* was wrecked on an unknown rock in 1893; a new shoal was discovered in 1952.

London and Spain.)[1] When Spencer, First Lord of the Admiralty, outlined his defence plans to the Cabinet in 1798, he had evidently digested Graham Spence's report, for he observed after stating that Sir Edward Pellew's squadron was to continue about Scilly for the defence of Ireland, 'Scilly, supported by the latest accounts received of it is very well adapted for the anchorage of a small squadron'. The need for some sort of naval station at Scilly was emphasized by two incidents. Early in the war, two vessels, a 74-gun ship and a frigate had been despatched from France to land on Scilly, when, according to Woodley,[2] the larger vessel providentially went to pieces on the rocks west of St Agnes and every soul perished. The frigate returned home. Then in 1798, the *Colossus* was lost off Scilly. This ship, which had been ordered home from Sicily by Nelson, to refit, contained on board a large part of Sir William Hamilton's art collection; it was a total loss.[3]

At this point, H.R.H. the Prince of Wales, as Duke of Cornwall, began to take an interest in the possibilities of developing port facilities at Scilly. Mr Tucker, Surveyor General of Cornwall was requested to examine the situation, and eventually, in 1808, after examining his engineers' evidence, he too produced a report.[4] Though it contrasts with Graham Spence, in that enthusiasm for his own project and desire to please his patron would appear to outrun dispassionate consideration of all the problems involved, it remains an extremely interesting document on problems of sailing ships and naval engineering. He rather pompously prefaces his subject as 'of vast national importance' for the neglect of Scilly 'is more to be lamented than any other error or omission in the general policy of the Empire... for never yet did such a jewel remain so long unpolished and unset'. After describing Scilly as the 'natural advanced outpost of Empire' he proceeds obliquely by condemning every other western port from Plymouth where 'there is not safe anchorge for more than five sail of the line' to Cawsand too dangerous for merchantmen in south-west gales. Neither there nor at Falmouth could ships sail to the west with any wind west of north-north-west. He quotes a number of naval disasters which might have been prevented through Scilly 'where ships can put to sea in all winds and weather'. As for Torbay, he never heard of it 'without prophesying that it would be the grave of the British Navy'. He paints indeed a fascinating picture of the behaviour of British admirals on the occasion when Admiral Howe was caught there in 1795 with a south-east gale which made sailing impossible. While 27 ships lost their anchors and the whole fleet was in imminent danger, he was apparently wringing his hands on the quarterdeck of the *Queen Charlotte* moaning: 'O my King, O my country. Every ship of this fleet will be lost'![5]

Tucker next blamed the Navy for neglect of Scilly since its advantages as 'a rendevous for ships of war, expeditions and convoys are so obvious... that only navy prejudice' could account for it. The Navy 'is more ignorant of the roads and anchorages... than of any port or creek upon the coasts of His Majesty's enemies... not one officer in 50 knows St. Mary's roadstead... not one in ten has been within three miles'. Tucker urged that Scilly's anchorage was superior and far less dangerous of approach than Plymouth Sound;[6] it had the advantage of being a rendezvous

1 See N.R.S., *Spencer Invasion Papers*, Vol. 46. Dundas wrote once or twice to Spence emphasizing the need for the protection of Scilly. 'I take it for granted a powerful squadron will always be employed in the neighbourhood of the Scilly Isles.'

2 See p. 16, Rev. G. Woodley, *Present State of the Scilly Isles*, London, 1833.

3 *Spencer Invasion Papers*, p. 494. See also Steel's *Naval Chronologist*, p. 31, which also describes a number of engagements off Scilly and the 1798 landings in Ireland.

4 Report of the Surveyor General of the Duchy of Cornwall to the Prince of Wales concerning... the formation of a safe, capacious roadstead within the Islands of Scilly, December 1808.

5 However libellous a picture, as a survivor of Quiberon Bay, Howe undoubtedly knew the weaknesses of Plymouth and Torbay.

6 He pointed the peculiarity that the tides do not in any way either at flood or ebb set upon any one of the islands but form a complete circle round them. The *Elizabeth* wrecked in calm weather in 1792 was carried round the islands three times in four days.

far to the west either for enemy pursuit or to protect Ireland[1] and above all it was the only place where sailing with westerly winds was possible. In peace, Scilly was an admirable trade convoy rendezvous for there were 'peculiar disadvantages which the foreign trade from Bristol, Liverpool, Greenock and the whole of the northern channel labour under' from having to rendezvous within the Channel. 'Ships sailing from these ports cannot get round Landsend to gain any port in the Channel in an Easterly wind which is a fair wind for them to proceed to their ultimate destination.' Consequently they have to put into Scilly until their fair wind is spent and a contrary wind enables them to reach the rendezvous where they have to wait for the next fair wind and another convoy. Although the convoy with which they would have sailed passes down the channel while they wait at Scilly naval prejudice is such that the officer in charge seldom approaches within sight! Scilly would also be of incalculable value to the merchantmen as a safe port in westerly gales.

Having established the total superiority of Scilly in its natural state, Tucker then pointed out how much more superior it could be with an enlarged anchorage with room for 10 sail of the line, many more frigates and 500 sail of transport or mechantmen.

Whatever might be argued in favour of Tucker's general tenets, it was the techincal supplements by the two engineers, Alexander and Greig which drew Sepnce's scorn.[2] These two gentlemen armed with Spence's report spent six blowy days on the islands considering the interesting possibility of building artificial breakwaters out from the islands to make Broad Sound a safe roadstead and to increase the anchorage of St Mary's Roads. Only two main problems seem to have struck them: the obtaining of sufficient local material and the labour to use it.[3]

As it was only possible to reckon on about 4 months work in the year 'the only working days are those which wind and weather permit' and about 4,730,040 tons of stone would be required the operation was estimated at about £2 million and 7 years using 600 men and boys at 25*s*. a week. Greig and Alexander concluded that their report was largely based on the opinion of local pilots concerning the set of tides and safe anchorage. Their long questionnaire is appended with replies by Thomas Mortimer[4] James Duff and John Jenkins, 'esteemed the best and most intelligent pilots on the islands'.

It is possible that Tucker naturally favoured a project that would bring fame and employment to the Duchy. It was unfortunate that his supporters did not spend much time in the islands and that on the vital question of artificial breakwaters the local pilots seem to have remained in mystified silence. Graham Spence did not. He asked the Secretary to the Admiralty William Pole if he could reply to the reort and joined battle. Wondering at the Government's capacity for squandering money for 'if two million pounds can be spent for building walls in the sea (I had almost said for building castles in the air) why not Tor Bay'![5] Spence proceeded to tear Tucker's report into shreds stating flatly that however desirable an artificial breakwater might be, it was not practical in face of tidal strength and ground swell.[6] Broad Sound was too far south-west and too exposed to the volume of the sea to make a safe roadstead; it would moreover block the only safe passage for ships passing through the islands. Another suggestion by Mr Rennie[7] received an even more

1 Where landings had been made by the French in 1798.

2 Report of a survey made with a view to proposing means to form a roadstead for men of war in the Islands of Scilly, London, 1808.

3 Tucker's blithe suggestion of using convict labour and appropriating any island for their accommodation which would 'very considerably reduce expense' was fortunately not taken seriously.

4 Great-great-grandfather of the present writer.

5 Spence favoured the development of Torbay and had sent in a report to the Lords Commissioners in August 1809. He had in his original report, however, pointed out that 'the largest fleets' might anchor in Scilly and lie as safe there as anywhere west of Spithead.

6 Remarks on a report by Benjamin Tucker, Surveyor General to the Duchy of Cornwall, on fortifications on Scilly 21 June 1809.

7 Appended to Tucker's report.

withering indictment since 'Mr Rennie confesses that he never was in Scilly and grounds his opinion on Trinity House information', nor has he 'sufficiently examined the situation in that minuteness which the importance of the scheme required'. His scheme (involving a breakwater between the Gugh and Spanish Ledges and from Minalto to Great Smith), would be totally useless since it would merely increase the volume of water pouring through the unprotected part of the Roads.[8] Spence emphasized the tidal peculiarities which increases the difficulties of sea defence building round Scilly since for 2 hours every tide, work would be impossible, adding at least a sixth to the estimated cost.[2] (While in most places the tide is slackest at high and low water, in Scilly there is the odd phenomenon that in Broad Sound the tide runs strongest 1–3 hours after high and low water and in St Mary's Sound, at high and low water.)

Spence concluded that Tucker's schemes were dangerous, difficult and probably impossible because of the exposed, violent waters and velocity of the stream. Moreover in underwater work (stones must be thrown overboard promiscuously taking their chance to fall when and how the sea and tide impel'. He doubted these two enemies would ever let a breakwater show its head. 'No work raised by the hand of man will ever be able to stand', concludes Spence gloomily and it would be hard not to agree with him.

This technical damnation, combined with the alarming expense, killed Tucker's scheme and peace buried it. Although the Reverend Woodley, who worked on the islands for many years, did strongly plead for a naval base and extended roadstead in his book written in 1822, later revised, he was pleading rather the cause of his flock than the strategy of an Empire[3] and the arrival of steam and global warfare in the meantime has reduced the islands' strategic and naval value. Nevertheless, while ships sail a study of wreck and lifeboat records indicates that Scilly is still not without value to the nation at war or at peace.

M. MORTIMER

THE FLOORING OF OFFICERS' CABINS

The note by J. D. Spinney (*M.M.* (1961), Vol. XLVII, p. 60) calls to mind that this question of floor cloths for officers' cabins runs all through the Portsmouth Dockyard Letter Books, now in the National Maritime Museum. Apparently captains might have red cloths but only flag officers were allowed green. Though Rodney speaks of them as being made of 'bays' the material was actually kersey and there seems to have been a constantly recurring shortage.

Interesting letters of 22 June 1755 (P.O.R./D.11) and 24 June 1755 (P.O.R./A.17) show that the demand of Sir Edward Hawke for green kersey floor cloth, backed up by the complaint that the existing red one hurt his eyes, had been met by the yard, but that Sir Edward then refused to part with the old red one. We wonder, did he want it for an 'under-felt' or did he intend to give it to officers who were not allowed the luxury of floor cloths.

The dockyard was told to insist on its return.

W. E. MAY

1 Spence did approve the joining of Rat Island to St Mary's which has now been done. He equally condemned the closing of Crow Sound, for which many a modern bad sailor can be thankful, since that route avoids much of the swell in the last hour of the journey by sea.

2 This problem was very evident when in 1951 a new pier was built at St Agnes and many working hours were lost through tides, wind and weather.

3 For 10 years from 1818 Scilly remained in a state of near famine, due to crop failure and the suppression of smuggling. But a suggestion from the Admiralty in 1825, based on a letter from Mr Rennie, that a new breakwater west-south-west of the roadstead might not only help the inhabitants but was worthy of consideration 'for maritime purposes' and to great public advantage received a crushing rejoinder from the Treasury: '. . . the expense which would be incurred in the construction of any work of any real public utility. . . would be such as wholly to preclude their Lordships from entertaining any further consideration of such a plan'.

MORE EVIDENCE OF THE SEPARATE EVOLUTION OF THE CLINKER-BUILT BOAT IN ASIA

In my article 'The Boats of East Pakistan' (*M.M.* (1957), Vol. XLVII, pp. 106–34), I established that the clinker-built boat had evolved in south Asia, from a dug-out based canoe, quite separately from its evolution in Europe. I described the series of clinker-built boats which exists down the rivers of the Sylhet district of East Pakistan, growing gradually more sophisticated as one travels downstream from the gorges of the Khasi Hills. The series begins with the simple Dawki canoe, based on a hollowed log, and ends with large clinker built river cargo boats, 50 ft. long and very well built indeed. I also described two other kinds of clinker-built boat in East Pakistan, the Khulna canoes and the *Khil Nauka*. I pointed out that all these boats except the latter differ from European clinker-built boats in many respects, but especially in that the overlaps of the planks, except for the lower edges of the garboard strakes where they meet the keel plank, are reversed, that is, the upper edge of the lower plank is outside the lower edge of the upper plank. This form of construction is known to the boatman as *digkata*, while the construction of the smooth skinned boats of East Pakistan is called *binekata*.

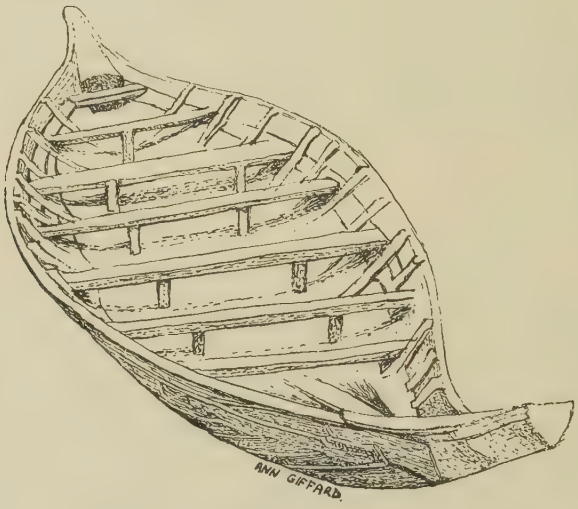

Fig. 1. Clinker-built dinghy from Mymensingh district, East Pakistan.

The observations recorded in the article published in 1957 were made in East Pakistan between September 1950 and April 1952. In May 1958 I returned to that country and stayed there until August 1959. During that time I had the opportunity of examining in a remote part of the Mymensingh district another type of clinker-built boat, also with the upper edges of the lower planks outside the lower edges of the upper planks, but in every other respect different in construction from the Sylhet *digkata*.

As I said in the earlier article the Sylhet boats are usually built up from a continuous keel plank and at either end they have a flattened wedge shaped *goloi* which is usually shaped from the ends of the keel plank, itself. This form of construction can be seen in Pl. 1d facing page 131 of Vol. 43 of the *Mariner's Mirror*. But the Mymensingh boats are quite different in form. They are small *dinghys* closely similar in appearance and construction, except for the planking, to an ordinary *binekata* dinghy of the form described on pp. 110–123 of Vol. 43. They have narrow pointed *golois* mounted on to the ends of a V-shaped keel plank. They have the shallow elongated

spoon shape of the smooth skinned river boats. As in both *binekata* and *digkata* boats the main planking is not brought at the bow and stern at all but is developed so that the ends of the planks themselves form the bulwarks at bow and stern if they were not surmounted by a horizontal strake or strakes which serve to bind the whole structure together and which form the actual topsides of the boat. But this form of construction is more developed that it is in the Sylhet boats and is as complicated and with as many strakes as in a *binekata* dinghy. The general appearance of one of the Mymensingh *digkata* boats is shown in the pen and ink drawing reproduced here.

Once when travelling by launch in the Dacca district near Sonargaon I saw briefly under the bank in a narrow canal several very broad and shallow *dinghys* of what appeared to be similar construction. They were very roughly built.

The existence of these further varieties of clinker-built craft in East Pakistan suggests perhaps more than one local root for the type. It may possibly be that the different kinds of *digkata* have evolved quite separately from one another, even in the small area of this one province of Pakistan, and at different times. On the other hand, it may be that the Mymensingh clinker-built boats represent a deliberate adaptation of the form of construction which I have shown to have evolved in Sylhet and the neighbouring parts of Assam to the older and much more widespread *binekata* form of hull. At any rate, the use of overlapping planking in East Pakistan is more widespread than first appeared. Further observations in the country and adjacent parts of Asia may reveal more examples of this form of construction.

BASIL GREENHILL

ROBERT DUDLEY BOOKS AND MANUSCRIPTS

(see *M.M.*, Vol. 47, pp. 142–4)

Francis Edwards Ltd., in their Catalogue No. 700, published in early 1950, listed as item 140 a. a copy of Dudley's *Arcano del Mare*, first edition, bound in a very fancy contemporary binding decorated with the Medici arms. This item may or may not have been part of the Leader Collection, but perhaps an inquiry to Mr C. E. Harris, of Francis Edwards Ltd., could give Mr Dunn a fresh lead in his search.

IRA DYE

Without being able to throw any light on the whereabouts of the books and manuscripts so interestingly described by Mr Oliver Dunn, it is allowable to suggest amendment of the phrase 'Leicester did not acknowledge his son's legitimacy': for there was no legitimacy to acknowledge.

When Leicester was a widower, his liaison with Douglas Lady Sheffield (not 'Lady Douglas Sheffield'), widow of Lord Sheffield, resulted in this illegitimate son. In Leicester's first Will (eleven pages of elephant folio all in his own hand) he refers to his 'base Son' unnamed, but as known to his wife (Lettice, formerly Dowager Countess of Essex) whom he trusts to be kind to the boy who is 'young and casual'.

In his second Will (printed by Collins in 1746) the 'base son' is named 'Robert Dudley'. In both Wills he is well provided for.

The claim to legitimacy was not attempted until the next century: when it was easily disposed of. And even had Robert Dudley been legitimate he could have had no right to the Northumberland Dukedom which had been forfeited under Queen Mary and the attainder never reversed. The Warwick Earldom was re-created by Queen Elizabeth for Ambrose Dudley, Leicester's brother, who died childless in 1589.

The only lawful title of Leicester's 'base son' was his knighthood, won after the Cadiz expedition of 1596.

After Sir R. Dudley fled from England with 'Elizabeth Southwell', he assured the Grand Duke of Tuscany that he had been a Colonel in Tilbury Camp in 1588, when in sober reality he was an undergraduate at Christ Church, Oxford. He also alleged to the Grand Duke that he 'took command of the English fleet in 1596 in the absence of his uncle the Earl of Nottingham'.

The Lord High Admiral was not created Earl of Nottingham until 1597, nor was he 'absent' in 1596 but as Lord Howard of Effingham commanded the expedition 'jointly and severally'

with the Earl of Essex. Dudley in 1596 served only as a 'voluntary gentleman': but presumably with some distinction because of his knighthood from Essex—whose knighthoods far from being 'cheap' (as alleged by nineteenth-century writers who did not know who they had been) were bestowed with considerable discrimination. (Until 1953 it was unknown which Cadiz knights were dubbed by Essex and which by the Lord High Admiral.)

The contrast is most striking between Dudley's nautical precision and his fictitious autobiographical fantasies.

The nineteenth-century oracle who pronounced him 'certainly legitimate' was not aware that certain papers catalogued as 'Robert Dudley's legitimacy' happen on inspection to be the official pronouncement of his illegitimacy.

Leicester had only one legitimate son, Robert Lord Denbigh, 'a child of Great Parentage and much greater hope,...taken out of this transitory into Everlasting Life in his tender age' in 1584. The effigy tomb of little Denbigh can still be seen in St Mary's Church, Warwick, near the tomb of Leicester and his Countess. The career of Robert Dudley, Earl of Leicester, from his service as Master of the Field Ordnance of St Quentin in 1587 to his command in Tilbury Camp in 1588 (and his sudden death ensuing) was for the first time fully elucidated from the direct evidence in Vols. I to VII of *Elizabethan England...'In Relation to all Foreign Princes'* (1933/4–1940) clearing away the jungle of nineteenth-century errors founded mostly on the anonymous libels which Queen Elizabeth declared 'only a devil could believe to be true', and Walsingham described as 'the most malicious written thing that ever was penned since the beginning of the world'.

A reproduction of the title page of *Dell Arcano del Mare* is in Vol. XII[a] (Epilogue) of the above-named history, p. 743. For though the self-styled *Duca di Nortumbria* was unblushingly mendacious as to his own life and actions, his *magnum opus* on naval architecture and cartography remains of technical interest to seamen and is much more than a mere bibliographical curiosity.

E. M. TENISON

AYSCUE AND COX IN SWEDEN

Some thirty years ago Mr Hj. Börjeson, who afterwards compiled the Swedish section of our *Lists of Men-of-War, 1650–1700*, sent me a transcript of a document setting out the terms on which Sir George Ayscue, Owen Cox and a number of other English officers and men were invited in 1658 to enter Swedish service. It was dated 10 September at Helsingør (Elsinore), Karl Gustaf of Sweden having just established himself on both sides of the Sound by the capture of Kronborg on the 6th.

The document is written in German; I have not attempted an actual translation, but can vouch for the accuracy of my version in all essential details. The first paragraph reads as follows: 'His Royal Majesty of Sweden to Admiral Ayscue and other English officers and seamen as to their pay and allowances in accordance with his most gracious declaration.'

Ayscue was to have the rank of Admiral with the usual accompanying dignity of Riks Räd (State Councillor) and was to fly his flag in a 'capital ship' of appropriate force. His pay was to be 4000 riks-dollars a year with the promise of further reward 'after faithful and brave service' and he was to have an additional allowance of 266 Rdr. a month while actually serving afloat. His captain, lieutenant, gunners and master were to be English and his ship was to carry a Swedish master as well.

Cox was to have the rank of Major (Rear-Admiral) with 4½ Rdr. a day, but might, if Ayscue wished, act as his Vice-Admiral and fly a flag as such.

A number of captains, either 13 or 14,[1] and the same number of lieutenants had been engaged by Fleetwood. The captains were to receive 3 Rdr. a day and the lieutenants 1½; but, to prevent jealousy on the part of Swedish officers of those ranks, whose pay was 3 and 1 Rdr. respectively, the additional amount was to come from some source other than the ordinary 'Navy Vote'.

1 The document has 'etliche' (several) with '14' added as an afterthought, but in the next line speaks of engaging 'all 13'.

Ayscue was to be given a secretary speaking English and German and paid as a lieutenant, and each of the two flag-officers was to have an English barber, who was to receive 16 Rdr. a month with an allowance of 45 Rdr. a year for 'medicaments'. Every captain might carry 4 'reformed officers' with an allowance of ½ Rdr. a day for their keep. The two English masters, one for Ayscue and one for Cox, were to be paid 1 Rdr. a day.

Pay was further allotted for 20 gunners at 16 Rdr. a month and 20 gunners' mates at 8, 40 carpenters at 16 and 40 mates at 8, 4 trumpeters at 12 and 2 cooks at 8.

The King had decided to hire a ship in England and Major Cox was to do his utmost to obtain a good ship of 40 guns, provisioned for 6 months, as cheaply as possible with 900 Rdr. a month as his limit. The fact that he is referred to as Major is worth noting, because Swedish sources ascribe his commission as such to an unspecified date in October. This ship was to be allowed the following complement and monthly pay for her various officers and ratings: captain 90 Rdr, lieutenant 45, master 30, 2 steersmen[1] 16 each, chief boatswain, gunner and carpenter 16 each with their mates 8 each, 4 quartermasters 7 each, cook 8, 133 seamen 6 each. For these 150 persons[2] 759 Rdr. a month were allowed for provisions.

There follow some financial calculations which I have not been able to master. I have, however, made out that both the crew of the hired ship and the other officers and men engaged for service in the Swedish fleet were to have 1 month's pay before leaving England and nothing more until after 6 months.

If a prize were to be taken after fighting, the captors were to share ¼ of the value of ship and goods; if there were no fighting, it would be ⅐. Compensation for disablement or pensions for widows and children should be on the scale usually paid in Sweden.

Some account of the doings of Ayscue and Cox in Sweden and of their much-delayed journey thither was given in a Note over my name in *The Mariner's Mirror* for 1926 (p. 458) and in the introduction to my edition of *Sandwich's Journal* for the Navy Records Society two years later, but some of this may bear repeating, with a certain amount of further information or surmise.

Ayscue was evidently on friendly terms with George Fleetwood, the Swedish 'Envoy Extraordinary' in England, since Whitelock records his elaborate entertainment at Ayscue's house in 1656. Towards the end of 1657, when Sweden had been at war with Denmark for 6 months and, though successful on land, had achieved very little at sea, an attempt had been made to engage English officers, but for the moment nothing seems to have come of this. Ayscue's commission as a Swedish Admiral was dated 26 August 1658 and even then he did not reach Sweden for at least another 7 months.

Meanwhile the situation in the Sound had changed. When the agreement was drawn up, Karl Gustaf was 'on top of the world' with the whole of Denmark except the capital in his hands and the Danish fleet in no condition to face his. Seven weeks later the position was reversed by the arrival of a Dutch fleet, which forced its way to Copenhagen, inflicting rather more damage than it received, and then, with the addition of a few Danish ships, was strong enough to contain the greater part of the Swedish fleet in Landskrona.

With the Dutch allied to Denmark it was almost inevitable that England should support the other side, but the help sent was 'too little and too late'. It was not until 13 November, a fortnight after the battle of the Sound, that orders were given for Vice-Admiral Goodson to sail for Denmark with 20 ships, roughly half the Dutch strength, and though he left the Downs on the 18th, he was forced back by bad weather and was not able to get away from Aldborough until 3 December. He got as far as the Skaw, but no farther, and was back on the English coast before the end of the month with nothing whatever accomplished.

Ayscue and his party were shipped in two detached ships of Goodson's fleet, the *Essex* and *Maidstone*, and in the Swedish ship *Engel*, perhaps hired by Cox. This ship left Queenborough about 9 December and was back at Yarmouth by the 24th. The two English ships joined Goodson off the Skaw on 10 December and returned with him. They then had Ayscue and

1 A 'styrman' seems to have been roughly equivalent to a master's mate.
2 The document, or at least the transcript, has '50', an obvious mistake.

nearly 200 of his men on board and these seem to have been landed at Harwich before the middle of January.

After this there comes a blank. The *Maidstone* made a second voyage to Denmark and reached Helsingør on 27 January 1658/9, but it is clear that Ayscue was not in her, since Karl Gustaf wrote as late as 29 March suggesting that he should bring 600 men with him instead of 300. On the other hand, we know that he came 'from the King' to visit Mountagu in the *Naseby* just outside the Sound on 15 May. Possibly he had arrived in Sweden about the middle of April; Sheldon, the shipbuilder, who is said to have 'come with Ayscue', was taken into Swedish service on the 19th of that month.

Mountagu had reached Helsingør on 16 April with a fleet roughly equal to that of the Dutch under Wassenaer. A second Dutch fleet under Ruyter was on its way and the junction took place at the northern end of the Great Belt on 7 June. After a good deal of letter-writing it was agreed that the English should remain to the north of Copenhagen and the Dutch to the south, while commissioners from the two countries tried to arrange terms of peace between Sweden and Denmark. So things remained until 26 August, when Mountagu left for home with his whole fleet, in spite of opposition from the English representatives, and simultaneously the King of Sweden refused mediation altogether.

During this confused period both Ayscue and Cox were at sea in command of Swedish forces. Ayscue was sent from Landskrona on 30 June with his flag in the *Viktoria* 74 and with 11 other ships to join Mountagu in the Sound. There was no actual combination of the two fleets, though Ayscue was again on board the *Naseby* on 8 July, but the Swedes were at least able to lie in the Sound unmolested. With Mountagu's departure Ayscue returned at once to Landskrona, while Ruyter brought his fleet northward and took Mountagu's place.

Cox was more actively employed. With 7 ships, nearly all taken from Ayscue's command, and flying his flag in the *Nordstjerna* 40 he left Helsingør on 8 July for Ebeltoft on the coast of Jutland and there on the 23rd took or destroyed 2 Danish and 3 Dutch ships with 40 small craft carrying troops for an attack on the island of Fyen. Returning to the Sound on the 29th he was promoted to Vice-Admiral next day.

Later in the year, when Wassenaer had left for home and Ruyter with the bulk of the Dutch and Danish fleet was away in the Belt covering a second attack on Fyen, Ayscue in the *Drake* 66 with Cox in the *Cesar* 54 as his second in command was sent from Landskrona on 6 November to intercept a Dutch convoy known to be on its way with provisions for Copenhagen. With the addition of three junior commands he had 17 ships under his orders by the 13th besides 6 more either north or south of the Sound, but the convoy proved to be well protected and the fall of Nyborg in Fyen on the 14th made it likely that Ruyter would soon return. Ayscue was therefore recalled on the 18th; but, as it proved, Ruyter had had to go to Lubeck for supplies and did not reappear off Copenhagen until 5 December.

This seems to have been the last of either Ayscue's or Cox's active service in Sweden. Ayscue may have remained in command of the ships in Landskrona until 6 March 1660, when a Swedish Admiral took charge, but of Cox we hear nothing beyond the fact that he was raised to the nobility under the name Sjölöw (Sea Lion) on the 8th of that month. This may have marked the end of his service as Vice-Admiral; his commission actually ended on 29 September 1660 and Ayscue's on the 8th.

Cox probably remained in Sweden, since it is known that he bought the Swedish ship *Rafael* early in 1661, but Ayscue was certainly back in England before 6 September 1661, when Pepys met him at a play. According to Zettersten 'some of the [English] captains remained in Swedish service', but he gives no names and there is no trace of them otherwise. If there were indeed 14 of them, they left no mark.

R. C. ANDERSON

NEW LIGHT ON THE MUTINY AT THE NORE

(See *M.M.*, Vol. 47, p. 61)

The Andrew Hardy of H.M.S. *Nassau* mentioned by Mr Timings was a member of one of several Huguenot families of maritime interest who settled in Cork after the revocation of the Edict of Nantes. The Besnards, for instance, had there the largest sail-cloth factory in these islands in the eighteenth century, with upwards of 1000 employees. A John Hardy was drowned off the North American coast in 1769 during his first voyage in a British naval vessel. A branch of the Cork Hardys became shipowners in the nineteenth century. Another Cork Huguenot, Labat, was in the *Mountjoy* when she saved Derry in 1689.

J. DE C. IRELAND

WIVES ON BOARD H.M. SHIPS

In addition to the names of wives at the battle of the Nile listed by Cdr. Rowbotham in *M.M.*, Vol. 47, p. 47, there was also a Christina White on board the *Majestic*. She later petitioned Nelson for a pension in a memorial which is among the Nelson MSS. at the Wellcome Historical Library. She describes herself as the widow of a seaman killed in the battle, 'and as for myself was left a widow with two children to the mercy of God: your petitioner hopes that your Lordship will consider her worthy of your Notice,' since she attended the surgeon and nursed the wounded on the voyage home for a period of eleven weeks.

CHRISTOPHER LLOYD

MORE LIGHT ON THE BIDEFORD POLACRES

There have from time to time been references in the *Mariner's Mirror* to the brigantines with pole foremasts which used to sail from the River Torridge in north Devon during the last century. There were a few very brief notes in the very early days of the Society for Nautical Research, but the main references, which indeed comprise almost the total record we have of these vessels, are a Note with four drawings by R. Morton Nance, vol. 17, pages 395–7, an Article with drawings and photographs by Vernon C. Boyle, Vol. 18, pages 109–24, and a Note, correcting some statements in this Article, by Boyle, vol. 18, pages 429–30.

The purpose of this note, which will assume familiarity with the material referred to above, is to record certain new facts which have recently come to light and to suggest that these facts may perhaps throw some doubt on the account of the origin of the rig of these vessels recorded by Morton Nance and Vernon Boyle and subsequently uncritically repeated by some other writers, including me. If the hitherto accepted account of their origin is wrong, then the place of these vessels in the history of the sailing ship is different from what was previously supposed.

The account of the origin of the rig of these ships previously given was that it was adopted to enable slow and unhandy vessels to navigate more easily under sail down the narrow and difficult channel which leads from Appledore Pool to Bideford or Appledore Bar. Vernon Boyle, who says specifically that the rig was evolved for this purpose, gives a corrected account of the sailing manœuvres employed as explained to him by men who had earned their livings by performing them. But what their accounts add up to is why a ship with square-rigged foremast was useful in these conditions, or was thought to be one hundred years ago. Neither these accounts nor the identical ones given to me on a number of occasions over the years by different seamen of Appledore, explain the unusual feature of the Torridge brigantines, namely that they had pole foremasts. The accounts of sailing manœuvres, taken against the background of the history of Appledore, provide, perhaps, an explanation of why very small square-rigged sailing ships survived, it seems, rather later there than elsewhere around the coasts of England. They do not give any real explanation at all of why these square-rigged vessels had pole masts, which is the particularly interesting thing about them. They therefore, do not support the statement that the pole-masted brigantine rig was evolved, or invented, or adopted, because of the difficulty of navigating the channel off Appledore in a fore and aft rigged vessel of hull form and sail plan such that she was unhandy in stays.

This fact is even more clearly true if, as Vernon Boyle recorded Morton Nance had been told, the pole-masted brigantines had been preceded by pole-masted brigs. For if this was so then the evolution to the fore and aft rigged mainmast was what might be described as a standard nineteenth-century process, though it perhaps happened earlier rather than later in the period during which the two-masted vessel square rigged and both masts gave way to the vessel with square sails or the fore only.

The question, 'Why pole masts'? then becomes even more obviously unanswered.

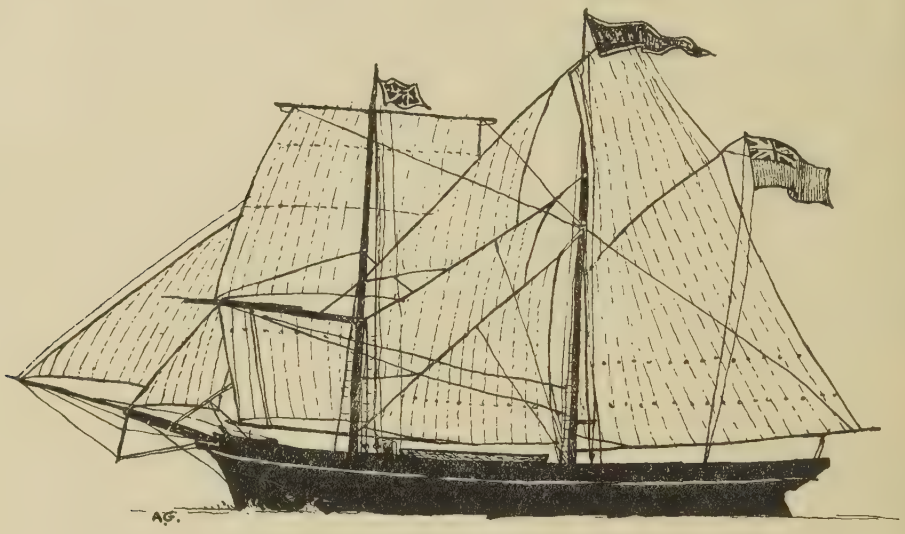

Fig. 1 Pole-masted brigantine.

Some evidence not recorded in the standard sources suggests that the traditional account of the polacres is indeed not adequate. H. Oliver Hill recently acquired a painting of a Torridge vessel, the *Sarah*, registered as built at Bideford in 1831, 95 tons, 61.4/19.1/11. In Lloyds for 1851 she is described as a 'Pol', in the 1856 register she is a brigantine. The painting shows a vessel with a fixed bowsprit and fidded jibboom, with a pole foremast rigged in the manner described by Vernon Boyle, with a foretopmast stuns'l set on the starboard side, but with three rows of reef points in the topsail and one in the foresail (Vernon Boyle's informants told him that the foresail had no reefs.) The mainmast is also a single pole with square mainsail with one row of reef points, square topsail with three reefs and square topgallant sail (in Appledore it would have been called the 'degannel') without reefs. She has a main topgallant stuns'l set on the starboard side. Besides the square mainsail there is a loose footed gaffsail without a boom set from a trysail mast immediately abaft the lower part of the pole mainmast.

In the Bideford Museum there is a painting, in need of restoration, of a very similar vessel. She is the *Henry*, recorded in Lloyd's Register as built at Bideford in 1833, 78 tons, 54.0/19.1/11.1. The 1841 Lloyds has her as a brig. In the 1851 register she is a brigantine. She, too, has two pole masts, with square mainsail and main topsail and a gaffsail with a boom set from a trysail mast. The caption in the Museum describes her as a 'Polacre Snow'.

There has recently come into my possession a painting (dated 1844 on a separate title strip which is not part of the fabric of the painting itself) of the *Newton* of Bideford, a vessel mentioned by name and also illustrated with a photograph in Vernon Boyle's article. Grahame Farr has given me a very detailed account of her register history. She was built at Cleave House (almost certainly at Lower Cleave Houses and most probably by Richard Chapman), on the west bank of the Torridge between Bideford and Appledore, in 1788. She was of 54 tons, 53.4/15.6/8.8 (she

was thus narrower and shallower than either the *Sarah* or the *Henry*). She was registered first as a brigantine, then as a brig and finally, about 1845, as a schooner. The first change of description probably represents a change of nomenclature rather than rig. The second probably marks the time when she lost the yards on her mainmast and became a polacre brigantine. The photograph used by Boyle which was taken at a much later date shows her rigged in this way. She was broken up in the 1880's.

All three of these paintings show vessels with painted ports. Lloyd's Registers of the 1850's have the majority of the vessels known to have been rigged subsequently as polacre brigantines entered as brigantines without any indication that they were pole masted, but there are some among them entered as brigs, and the use of the term brigantine at this time does not necessarily mean that they carried yards on only one mast. Morton Nance was told that the *Swan* had once carried a square main topsail. The pole-masted vessel recorded in the drawings reproduced by Morton Nance on page 395 of vol. 17 looks like an almost twin sister of the *Newton*. Nance expressed the view that she was obviously not British, but on the evidence of the three paintings described it seems very likely that she came from the Torridge. The *Illustrated London News* of 12 October 1850 mentioned that the *Eliza*, polacca brig, had been driven ashore on Morte Sands. But Lloyd's Register for 1841 gives the *Eliza* as a brig, built at Appledore in 1840.

It thus appears not impossible that in the late eighteenth and early nineteenth centuries the Torridge was the home of a fleet of pole-masted vessels carrying yards on both masts, from which the polacre brigantines descended. If this is so, the question posed is: 'Where did these pole-masted "brigs" come from?' Perhaps such vessels were not uncommon in British waters at an earlier time and they lingered on among the conservative seamen of Appledore. This is a question 'outside my period', as professional historians sometimes say, and I hope that other members of the S.N.R. may be persuaded to suggest answers. Such vessels were not unknown in the Mediterranean in the early twentieth century. The arrangements for furling the square topsail in the *goolet* illustrated on page 59 of *The Last Days of Mast and Sail* are very like those used for the foresail of the *Newton*. On the other hand, the existence of these vessels, if they did exist, perhaps gives support for the 'buss' theory of the origin of the brig and brigantine—for which see 'Square Rigged Vessels with Two Masts' on pages 194–205 of Vol. 7 of *The Mariner's Mirror*.

Polacre brigantines went on Mediterranean voyages as long as the rig was used at all. Captain Jewell of Northam recently showed me a fine pair of watercolours of the *John Blackwell* entering Naples in the early 1860's. She was probably built at Weare Giffard in 1862 and appears in Lloyd's Register as a schooner, and the captions on the paintings describe her without qualification as a schooner. She was commanded at one time by Captain Jewell's uncle and the tradition in the family is that she was rigged as a polacre brigantine, not because of the difficulty of navigating the Appledore channel but because, despite the great size of the fore topsail, it was a very handy rig for a very small ship on deep water—a view with which the late Conor O'Brien would have agreed. Ann Giffard has made a line drawing from one of these watercolours—the other shows the *John Blackwell* reefed down in a gale—which is reproduced here. Captain W. Harris of Appledore recently told me of three other such pairs of pictures of polacre brigantines entering Naples which used to hang in Appledore houses, but which, like so much other evidence of this kind, has been destroyed in recent years.

The paintings of the *John Blackwell*, and those of the three 'brigs', clearly show one of the reasons the square rig was abandoned. The *John Blackwell* has a crew of six. Though when the *Newton* was damaged in a gale in 1851 the Wreck Register shows her crew as three men, the other three paintings, including that of the *Newton*, show five men on board each vessel. Ketches and smacks the size of these little ships would have made do with two men in the local trade about the Bristol Channel and at the most four, and probably three, on deep water and in the general home trade. As Captain W. J. Slade, the author of 'Out of Appledore', said when he saw the *John Blackwell*'s portrait: 'Those were the days when the crew used to row ashore to bring off the Master when the vessel was ready for sea, in our day the Master had to row ashore to find the crew when *he* had got the vessel into a state fit to make the voyage.' So it is not surprising that more than one of these tiny brigantines was derigged as a smack.

BASIL GREENHILL

POLACCA RIGS IN THE BRISTOL CHANNEL (STATUTORY) REGISTERS

Lists of Bristol Channel registrations have been examined to see if further light can be thrown on the origin of the term 'polacca' when applied to north Devon vessels. For two Ports in this area—Bideford and Saint Ives—the Statutory Registers date from 1786, while similar surviving material for the other Ports dates generally from 1814. The description 'polacca', with or without further qualification, such as 'polacca schooner', does not appear therein until 1836, when there are four examples. Three were registered at Barnstaple and the fourth at Swansea, in all cases older vessels previously registered as brigantines. The last registry was in 1878 at Bideford for a vessel formerly described as a brig. Apparently the last polacca to survive was the *Mary Farleigh*, built at Ilfracombe in 1864 and immediately registered at Barnstaple as a polacca schooner. She was transferred to Fowey in 1871 and, somewhat unexpectedly, re-registered there as a polacca, retaining that description until wrecked in 1902.

All told, there are 33 examples, 17 first registered at Barnstaple, 12 at Bideford, 2 at Swansea, and 1 each at St Ives and Milford. They comprise 6 polaccas, 20 polacca schooners, and 7 polacca brigs. Tonnages varied between 37 and 132, with an average of 65. All but 7 were built in north Devon, and, of the seven, six were local re-riggings, with the seventh an unusual case (incidentally the largest of the lot) of a polacca built at Pwllheli and at once registered as such at Milford. Only nine were first registrations, the remainder having been previously registered with other rigs—sloop, schooner, brigantine, brig and 'schooner-brig'.

A cautionary note immediately becomes necessary. Before jumping to any conclusion about the antiquity, or in this case the apparent lack of antiquity of the rig, we must not forget that description by rig of masts was just beginning with the nineteenth century, the earlier nomenclature being usually based on form of hull, or occupation of the vessel. Also, in passing, I have not been able to ascertain when the rig was first named in the 'Corporation' Registers. For instance, it does not appear in the 'Key to Abbreviations' of the *Merchants' Register* (Red Book) for 1816, but does in the equivalent section of *Lloyd's Register* for 1841.

As a number of the polaccas mentioned by Boyle were not registered as such, as well as the subjects of two of the three paintings mentioned in Greenhill's note, the impression is that poles masts were not regarded as sufficiently unusual to guarantee the word polacca being added to the description. It is extremely unlikely that they did not appear until 1836 and so, I feel, the evidence of the Statutory Registers in this instance can only be regarded as supplementary, and not as definitive. In fact, as Greenhill suggests, there is a strong possibility that polaccas were in use in this area, and perhaps elsewhere, at a much earlier date than we might expect. One can only add a plea that readers should report in these pages the earliest mention or description they have found of British polaccas.

(I wish to acknowledge with thanks the facilities afforded me by the Commissioners of Customs and Excise for studying the registers at the Custom Houses concerned.)

		As polacca					
Name	Year and place of build	Year reg'd	Port Reg'y	Description	Tons	Previous rig(s)	Later history
Mary Ann	1826, Bideford	1836	Be	Pol sr	61	sp/bn	Lost 1859
Fanny	1821, Barnstaple	1836	Be	Pol sr	43	bn	To sr 1846
Agenoria	1805, Barnstaple	1836	Be	Pol sr	39	bn	To sr 1847
Good Intent	1804, Barnstaple	1836	Sa	Pol bg	48	bn	To sr 1845
Favourite	1792, Bideford	1837	Bd	Pol bg	57	bn/sr	To sr 1841
Friendship	1794, Bideford	1837	Bd	Pol bg	57	bn	To sr 1847
Cyrus	1837, Pwllheli	1837	Md	Pol	132	—	To bg (?1851)
Elizabeth	1814, Barnstaple	1838	Bd	Pol sr	59	bg	To sr 1850
Lady of the Lake	1838, Appledore	1838	Md	Pol sr	64	—	To sr 1847
John and Elizabeth	1801, Bideford	1838	Bd	Pol bg	58	bn	To sr 1842

Name	Year and place of build	As polacca: Year reg'd	Port Reg'y	Description	Tons	Previous rig(s)	Later history
Sarah	1831, Bideford	1838	Bd	Pol bg	95	bg	To sr 1842 (again pol 1860–72)
Fanny	1820, Bideford	1839	Bd	Pol sr	49	sp/sr	Lost 1841
Eliza	1824, Barnstaple	1840	Ss	Pol bg	44	bg	Lost *c.* 1841
John	1843, Barnstaple	1854	Be	Pol sr	93	sr	Wrecked 1864
William and John	? (foreign)	1854	Sa	Pol bg	85	—	To bg (?1855)
Elizabeth	1858, Appledore	1858	Be	Pol sr	69	—	To ketch 1876
Sylvanus	1843, Park, Glam.	1859	Be	Pol sr	75	sr	Abandoned 1880
Hazard	1819, Bideford	1859	Be	Pol	59	sr	Wrecked 1861
Thomas and Mary	1833, Bideford	1860	Be	Pol	51	sr	Sank 1862
John Blackwell	1862, Bideford	1862	Bd	Pol sr	65	—	Wrecked 1865
Erin	1830, Bristol	1862	Bd	Pol sr	50	?*	?
Henrietta	1830, Newport	1863	Be	Pol	50	sr-bg	Wrecked 1880
Fanny	1821, Barnstaple	1863	Be	Pol sr	44	sr	Wrecked 1865
John	1805, Youghal	1863	Be	Pol	37	sr	To smack 1874
T.C.	1863, Ilfracombe	1863	Be	Pol	65	—	Wrecked 1869
Wave	1864, Appledore	1864	Bd	Pol sr	65	—	To ketch 1882
Mary Farleigh	1864, Ilfracombe	1864	Be	Pol sr	91	—	Wrecked 1902
Frolic	1864, Ilfracombe	1864	Be	Pol sr	51	—	To smack 1878
Oakwell	1803, Bideford	1865	Be	Pol sr	91	bg	Broken up 1885
Two Sisters	1865, Bideford	1865	Be	Pol sr	78	—	To sr 1788
Lord Rolle	1829, Annery	1877	Bd	Pol sr	98	bn	Broken up 1889
Nuggett	1825, P.E.I.	1877	Be	Pol sr	64	sr	To ketch 1884
Harmony	1854, Bideford	1878	Bd	Pol sr	69	bg	To ketch 1887

* Formerly owned at Cork.

Port abbreviations: Bd = Bideford, Be = Barnstaple, Md = Milford, Sa = Swansea, Ss = Saint Ives.

GRAHAME FARR

ANSWERS

18. (1957.) MONK'S 'LEFT WHEEL'. I think the story is first found in John Aubrey's *Lives* and may have been repeated by Anthony À. Wood. Aubrey and À. Wood both overlapped, biographically, with Monk.

OLIVER WARNER

18. (1960.) *H.M.S.* INCONSTANT. The question is why a ship should be called the *Inconstant* and why the name should have been repeated several times in the British Navy. The answer to the second part is difficult apart from the easy quip: 'a guilty conscience'.

The name has a French flavour and indeed a glance at the list of shipnames recently issued by the *Triton* shows that there were six masculine *Inconstants* and three feminine *Inconstantes* in the French naval and auxiliary services. For the meaning of the name one would hazard, the sea, the inconstant element, Ocean, masc. Mer, fem.

Inconstant: were six privateers.

Inconstante: three navy ships, of which a frigate (burnt at Martinique 5 July 1781) a second frigate taken by H.M.S. *Penelope* 25 November 1793, renamed H.M.S. *Convert*, wrecked 8 March 1794. And finally a corvette captured by the English in 1794, renamed H.M.S. *Matilda* and later renamed again *L'Inconstante*.

J. LEPELLEY

It is doubtful whether the *Pallas* captured in 1778 was renamed *Inconstant* before she became the *Convert*. The lists at the Admiralty show her only under the latter name, and in the P.R.O. lists of ships in sea pay in July 1779 the *Convert* is shown as having commissioned in November of the previous year (five months after the capture). This ship was sold *c.* 1782.

The *Inconstante* captured by the *Penelope* and *Iphigenia*, 25 November 1793, was certainly renamed *Convert*. She was wrecked on Grand Cayman on 8 March 1794.

C. G. PITCAIRN-JONES

The first ship in the R.N. to bear the name *Inconstant* was the frigate prize *Pallas* taken in 1778. About 1782 she was renamed *Convert*. A French warship of the name *L'Inconstant* transported Napoleon from Elba to the Continent where he terminated his career at Waterloo. Does this fact have anything to do with the Admiralty's predilection for the name *Inconstant*?

EDGAR K. THOMPSON

1*b*. (1961.) Inquiry re certain officers and men. *Euryalus* was built at Buckler's Hard 1803: Hulk sold 1860. 1822–25, Captain A. W. J. Clifford—Mediterranean. This was probably her last active employment. In 1827, she was in ordinary at Chatham and from 1828 or 1829 to 1844 was employed as a convict hulk. She then went to Sheerness as a coal hulk. I have an idea that in the 1850's she was renamed *Africa* and used as a convict hulk at Gibraltar.

C. G. PITCARN-JONES

3. (1961.) Surgeons to prisoners of war. In the eighteenth century naval surgeons were normally responsible for prisoners of war because up to 1796 the care of the latter was the duty of the Sick and Wounded Board. Even after that date, when the care of prisoners was transferred to the Transport Board, most surgeons in charge had once been naval surgeons. A possible explanation for the terms of the appointment of Surgeon Evan Evans may be that in 1790 Surgeon's Mate was a rank, and Assistant Surgeon at Mill Prison a post filled by the Sick and Wounded Board. This board was responsible for surgeons after they entered the service, the Navy Board only being responsible for the issue of their warrants. In 1797 the naval surgeon at Forton Prison, Portsmouth, resigned from the service on the grounds that his position was 'neither profitable, comfortable, nor respectable'. In 1805 the rank of Surgeon's Mate was amalgamated with that of Assistant Surgeon. His pay was raised to 8*s*. 6*d*. a day, but he still had to provide his own instruments.

CHRISTOPHER LLOYD

5. (1961.) Bomb vessels. David Mathew writes in the book *British Seamen* (London 1943, p. 22) 'The bomb vessels, so characteristic a feature of the early Georgian Navy, date from his [James II's] reign'; and on page 19 there is reproduced a contemporary engraving entitled, 'The Bombarding of Dieppe by His Majesties Bombships, 1694'.

D. E. KENNEDY

The following are a few occasions on which bomb vessels were employed before 1759. There were doubtless many others:

16 November 1693. Bombardment of St Malo by Captain John Benbow.
1 October 1719. Reduction of the Castle of Castro, Vigo, by Admiral James Mighells.
6 March 1740. Attack on Puerto Cartagena by Admiral Edward Vernon.
8 March 1748. Attack on Hispaniola by Admiral Charles Knowles.
12 February 1756. Capture of Angria's stronghold at Geriah by Admiral Charles Watson. (H.E.I.C.'s bomb ketches.)
29 December 1758. Capture of Gorée by Commodore Augustus Keppel.

W. B. ROWBOTHAM

Admiral Vernon made considerable use of bomb-vessels in his West Indian expedition of 1739–42. Mr Spinney will find full details including Vernon's orders for their employment, in my edition of *The Vernon Papers* (Navy Records Society, 1958) if he follows the references to 'bomb-vessels' in the index.

B. MCL. RANFT

Celebrated occasions when bomb vessels were used before 1759 include the French bombardments of Algiers in August 1682 and June 1683 and of Genoa in May 1684.

In *Le Maréchal de Tourville et son Temps* (Paris, 1942) the late Jean de La Varende devoted pages 95 and 108–119 to these incidents and to an excellent description of *La Cruelle* designed by Petit–Renau, a Basque, with illustrations. This was the prototype bomb-vessel. More can be found on the subject in the publications of 'L'Association des Amis des Musées de la Marine' (Paris), viz. *Triton*, no. 52 (1/1960) p. 28, and *Neptunia* (2/1960), p. 6.

J. DE C. IRELAND

7. (1961). An obscure object. May it not be presumed that the somewhat mysterious object in question may be a kind of multiple life-buoy to be used under some special circumstances, such as when lowering manned boats or as marker buoys?

J. W. VAN NOUHUYS

The curious thing slung from the mizzen boom is an arrangement for hanging fresh meat. It consisted of a round wooden board carrying a number of lanyards each ending in an iron hook. Fresh meat, usually received in whole carcasses was cut into smaller pieces and fixed on the hooks, to be kept fresh and cool and out of reach of pilferers. The device was widely used in Denmark in both merchantmen and men-of-war. In 1897 in the *Jupiter* we had the same thing slung in the fore-rigging just outside the galley. It was surrounded by a screen and looked like a large canvas cylinder.

CARL V. SØLVER

The French engraving of the *Bellerophon* shows a life-buoy hanging from the mizzen boom. Barrot de Graillard, in his *Construisez des Modèles Réduits de Marine* (1939) describes these buoys as being common aboard French warships of the nineteenth century. They consisted of a wooden disc, often surmounted by a coloured pennant on a short staff, with rope tails hanging from the perimeter for the floating man to grasp. The depiction of such a buoy on a British ship is probably a mistake by the artist.

J. J. MATHER

Several other readers are thanked for their interesting letters on this subject. The consensus of opinion seems to be that this particular obscure object is a buoy of some sort. The correspondence may now be considered closed.—(*Editor.*)

7(*g*). (1961.) Keel hauling. Botelar describes this form of punishment in his *Dialogical Discourses on Marine Affairs*, printed in 1685 as follows: 'The duckinge at the maine yarde arme is when a malefactor by haveing a rope fastened under his armes and about his middle and under his breech is thus hoysed up to the end of the yarde from whence he is againe violently let fall into the Sea, sometimes twise sometimes three severall tymes one after the other and if the offence be very fowle he is also drawn under the very keele of the Shippe the wch is called Keele rakinge and whilst he is thus under water a great gunne is given ffyre unto, right over his head, ye wch is done as well to astonish him the more with thunder thereof, wch much troubles him, as to give warneinge unto all others to looke out and beware of his harms.'

G. H. FOXLEY

QUERIES

8. (1961.) Scots and English in Italian service. Nowhere in the innumerable publications the Italian press is turning out in these centenary years of Italian Unity is there any mention of the fact that the meanderings of Garibaldian steamers and indeed Royal Italian Navy steam vessels were only possible because they had British engineers. The Royal Italian Naval Engineer corps had not yet been formed. As a child in Genoa I heard the older generation talk of Wate and Charles Parkes of the postal steamer Calgiari which carried the Pisacane expedition, of 'captain' Bell and his comments on the Battle of Lissa, old Clucas and grandfather Macfarlane who asked about the redshirts sourly commenting that they looked like the sort of people you saw going out to dog-fights on a Sunday morning in Glasgow. Garibaldi was eternally grateful to Cdr Wright of the Duca di Genova who picked him up after the royalists wounded him at Aspromonte. There

are families with British names in most of the main Mediterranean ports that have been there since steam was invented. Has any record survived of any of these modest, inarticulate servants of British industrial expansion—captains, engineers, guarantee men and surveyors for Babcock and Wilcocks, etc., etc.? Particularly I would welcome records of service in the Italian navy and answers to such questions as to what their terms of service were and who was the last man in it.

J. LEPELLEY

16. (1961.) British naval dress. Clemence Dane in her *Nelson Touch* quoted a letter of Lord Nelson's to the Lords Commissioners dated from the *Victory*, at sea, 20 November 1804. He writes:

'. . . I must beg leave to observe that the quality of the said Guernsey jackets is most excellent, but that they are considerably too narrow and short to be tucked into the men's trowsers. . . the shrink very considerably in washing and when the seamen are on the yards, reefing or furling sails, the jacket rubs out of their trowsers, and exposes them to great danger intaking cold in their loins; so that with this alteration (three inches wider and six longer) they would certainly be the best and most valuable slops that ever were introduced into the service.' I would be interested to know whether George P. B. Naish or Dudley Jarrett whose British Naval Dress was reviewed in our last number, or any other of our experts can specify what this Guernsey Jacket was. Incidentally the earliest quotation for a 'guernsey' which the *Oxford Dictionary* can record is 1851. An earlier one which I would like to record here is from Trelawney's *Adventures of a Younge Son* (1833): 'the other fellow the Dutchman, who came staggering on in his wake, was budged out into preposterous proportions; his red Guernsey frock and ample Dutch trowsers, secured at the wrists and knees, were crammed with stowage of gold and jewels. . . he looked like a woolsack and moved like a Dutch dogger.' Guernsey Frock is the rather precious way in which in recent times one describes the Guernsey sweater, from the patois 'en froc de Guernsi'. However, when this enquirer was a schoolboy in Guernsey forty years ago a 'guernsey' was called 'a jersey' (may Heaven forgive us).

What, is the question asked here, did Nelson mean by a 'Guernsey Jacket'? Secondarily, Are there any earlier references to a 'guernsey' than that of the *Oxford Dictionary* as 1851 'a thick knitted closely fitting vest or shirt usu. of blue wool worn by seamen'.

J. LEPELLEY

17. (1961). Inquiry re movements of certain transports. On 18 March 1808 Private James Burrough of the Sixty-second Regiment of Foot, wrote home from Gibraltar, giving some details of his voyage thither. He was on the way to Sicily, where the first battalion of the regiment had been since November 1806. Where the voyage started is uncertain, but a previous letter dispatched from Falmouth is mentioned. On 24 February the fleet met bad weather in the Bay of Biscay and one ship was lost, but all the men were saved by the other vessels. On 9 March there was an engagement with Spanish gun boats, lasting an hour and a half, during which seven of them were taken. Another transport engaged fourteen gun-boats without success. The Spaniards apparently used nothing heavier than grape shot, and the casualties on Burrough's ship amounted to one grenadier and the mate of the ship wounded. The next day they reached Gibraltar. Burrough noted that the fleet entering Gibraltar comprised one hundred and thirty-nine sail.

Can anyone add to the details of this voyage, and name any of the transports, particularly that which was lost? The large fleet entering Gibraltar is a puzzle, in view of the minor action of the previous day, when the transports seem to have been on their own. It rather seems as if warships based on Gibraltar only escorted them at the last stage of their journey. Regimental sources can only provide the information that the first battalion was already in Sicily, and that the recently raised second battalion remained in England until 1809, so that Burrough must have been one of a reinforcement draft. His letter was countersigned by his company commander, Captain Skeine Keith, who has been traced in a contemporary Army List.

J. D. MOODY

18. (1961.) THE *ISABEL* AND THE PRIVATEER *RESOLUTION*. Is it possible to obtain information on the capture of an American schooner named *Isabel* by a British privateer called *Resolution* about 1793? (The exact date is unknown.)

The American schooner carried, as passengers, ten French sailors who, after their capture, tried to take possession of the privateer. They did not succeed and in this fight several were either killed or wounded. Is anything known of what happened to the survivors? In the service file of one of them there is no mention that he was ever a prisoner-of-war, and in 1794 he was already (though he had received five severe wounds in the fight) serving in the French navy.

How did the privateer *Resolution* dispose of her prisoners?

ETIENNE SIGAUT

19. (1961.) JOHN LAIRD. Information is sought about a British naval officer, John Laird, sent by George III's government in or about the year 1809 as a consul to Dubrovnik (then the Republic of Ragusa), but diverted to Rijeka, where he became consul and played no small part in working up feeling in Dalmatia against the Napoleonic occupation. The notes of the former Austrian secret service about Laird's activities can be seen in the archives at Zagreb, and a miniature of Laird, and his original commission as consul are in the possession of a well-known Yugoslav maritime historian, Vatroslav Cihlar, at Opatija, near Rijeka.

John Laird II, his son, was the engineer responsible for constructing, for the old Austro-Hungarian monarchy, the harbour of Rijeka (Fiume), which was to be the port of the inland Kingdom of Hungary. It was at Rijeka that Whitehead perfected his torpedo, and the Whitehead works still flourish in what is today rapidly becoming the major port of the Adriatic.

John Laird III, grandson of George III's officer, was a Yugoslav patriot, and when the Austro-Hungarian empire broke up in 1918 he became maritime governor of Croatia, and opposed the D'Annunzio coup which resulted in Italian occupation of the western half of Rijeka. He was a well-known yachtsman, and at his death left the bulk of his fortune (200,000 gold dinars) for the support of orphans of Yugoslav seamen lost at sea. His name is still revered in Dalmatia. Details of the early career of his grandfather would be of great interest to Dalmatian maritime circles and in general to students of maritime history.

J. DE C. IRELAND

20. (1961.) ANOTHER OBSCURE OBJECT. The sketch below is of an object I bought recently in a little antique shop in Bradford-on-Avon where they could give me no information as to its origin. What is it?

DAVID SPINNEY

Slightly above actual size. Material looks like silver but is not. Disc with anchor and dragon emblem withdraws from laurel leaving surround like the usual naval belt buckle.

21. (1961.) Inquiry re certain merchant ships. In October 1778 a British ship *Venus* and another *Major Pearson* (some accounts say of the Irish line) were captured by American privateers and taken into Little Egg Harbor (Chestnut Neck), New Jersey.

The capture of these large vessels precipitated an invasion of Great Bay, N.J., by fleet units under Captain Henry Colins and Captain Patrick Ferguson of the Army and Captain Colins of the Royal Navy.

Sir Henry Clinton ordered this attack to clean out what he called 'A nest of rebel pirates'. The town of Chestnut Neck was laid to waste and never rebuilt. The attacking party found the *Venus* at dock at Chestnut Neck and being too large to remove was set afire.

We have recently uncovered her and have been trying for some time to get some information on the ship. Neither the Museum and Greenwich nor the Merchant Navy and Airline Officers' Association could give me any facts on this vessel.

I would be glad to be informed of any material on either the *Venus* or *Major Pearson*.

FRANKLIN KEMP

RECORDS

STUDIES OF BRIXHAM TRAWLERS BY NORMAN WILKINSON, O.B.E., P.R.I.

An artist's rough sketches, especially when made on the spot, are always a source of profound interest to the student of marine drawing and painting and are also a most valuable contribution to nautical research; all the more is this so when they depict types of craft that are fast passing away

Our member, Mr Norman Wilkinson, has been kind enough to allow us to reproduce here some examples of preliminary sketches selected from his ample collection of marine studies.

(*Editor.*)

Fig. 1

Fig. 1

(*Facing p.* 310)

Fig. 2

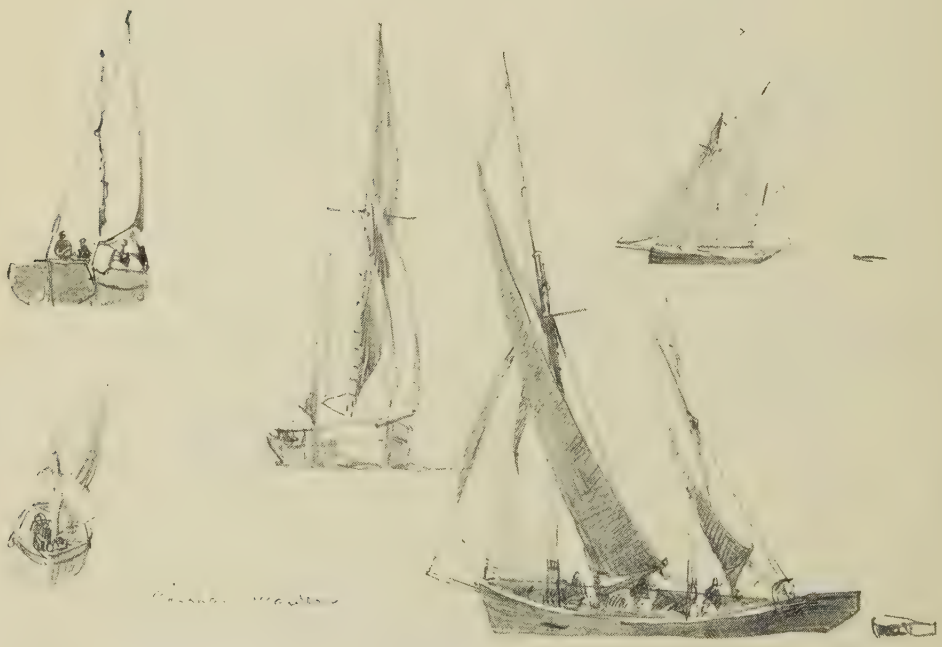

Fig. 3

REVIEWS

THE BRITISH DESTROYER. By CAPTAIN T. D. MANNING, C.B.E., V.R.D., R.N.V.R. London: Putnam. 1961. $9\frac{3}{4} \times 7\frac{1}{4}$ *inches*; 148 *pages*, 136 *photographs*. Price 42*s*.

'Throughout the history of war, cavalry have been surrounded by a glamour possessed by no other arm' wrote General Fuller some years ago. In recent British naval history, however, destroyers have commonly been considered to have run them close, and it is surprising that until now there has been no book devoted primarily to the development and characteristics of the ships themselves.

From 1893, when Yarrow launched the *Havock*, quickly followed by Thornycroft's *Daring*, up to the *Daring* class of ten years ago, British shipyards provided the Royal Navy with something like 980 destroyers and flotilla leaders. With one foreigner acquired by purchase and another by capture, the *Zubian* contrived out of the sound portions of the damaged *Zulu* and *Nubian*, and the fifty 'Town' class flush-deckers received from the United States in the 'ships for bases' barter of 1940, the field thus covers some 1033 vessels. This very properly includes the 'Hunt' class which, though laid down as fast escort vessels and demoted to frigates after the war, were undoubtedly destroyers in 1940 since the First Lord said so, but Captain Manning understandably jibs at the 5000-ton 'guided missile destroyers' now building and gibes at their name, as implying a ship which destroys guided missiles.

Private enterprise contributed notably to the development of the destroyer. Warned no doubt by the failure of the torpedo-gunboat as a torpedo-boat 'catcher' and recognizing the need for specialist experience William White, the D.N.C., limited himself to a sketch design for the first destroyer and opposed building destroyers in the Royal yards. Two destroyers and two leaders were built in Portsmouth Dockyard in the 1930's; all the rest were contract-built, over 50 per cent by six firms—Thornycroft, Clydebank/John Brown, Hawthorn Leslie, Cammell Laird, Yarrow and White—all amongst the builders of the first '27-knotters'. Two more foundation members, Fairfield and Vickers, with another two fairly early starters, Swan Hunter and Denny, were responsible for another 25 per cent of the total. In the early days, builders were given considerable latitude and the resulting variations, many of great interest, are difficult to follow in contemporary books of reference, so Captain Manning's notes and his excellent selection of photographs are most welcome. For all their tentative features and what would now be considered as primitive discomfort, they were fine ships handled by fine seamen. Eleven out of the original 42 27-knotters of 1893–95 and the great majority of the 30-knotters that soon followed took an active part in the Kaiser's war. Amongst the pre-1914 casualties were the *Viper*, stranded off Alderney during manœuvres in 1901, and the *Cobra* who broke her back six weeks later on passage from the contractor's when the seasick stokers of the navigating crew were unable to keep steam. Both were very early turbine warships and their loss left a prejudice against 'snake' names and, more unfairly, against turbines. Of more lasting interest, perhaps, is the fact that the *Cobra* was the only British destroyer ever to be lost through force of weather alone. (The *Chamois*, shown as foundering in 1904, was holed through the disintegration of her own propeller.) As a result of the *Cobra*'s loss, the 'River' class were strengthened and made more seaworthy at the expense of some speed. A lively account of the *Dee* and *Exe* in a typhoon is given in Cradock's *Whispers from the Fleet*. Critics of British warships would do well to remember that four American destroyers were victims of weather in the last war. On the other hand, it may be recalled that Mr Churchill as First Lord in 1913 was critical of British conservatism: 'Building slow destroyers! One might as well breed slow racehorses.'

Be that as it may, British destroyers came out of World War I with great credit, even if some readers may not consider Jutland their finest hour. Destroyers may have been no more immune

than other types from the gap in weapon and tactical training criticized by Lord Chatfield; with some eminent exceptions the amateur spirit so characteristic of the Island Race may, in matters other than ship-handling and seamanship, have died harder in destroyers than elsewhere in the Service. It was certainly unfortunate that, as Lord Cunningham has recorded, the luck of the draw led to so many of the most experienced North Sea destroyer captains being in the *Beagles* in the Mediterranean in 1914, when their precept and example would have been invaluable in the main theatre. It may also be that earlier acceptance of the doctrines and methods introduced by Tweedie, as Commodore (D) in 1917, might have given better results at less cost at Jutland. Nevertheless the professional spirit which Tirpitz sought to cultivate in his flotillas achieved no more, and in fact usually did not lead even to a willingness to stay and fight it out, unless in considerably superior force.

Between the wars, the record shows the influence of financial stringency, the ideal of collective security and restrictive treaties on destroyer development, but by and large, when new construction was resumed in a modest way, British destroyers compared not too unfavourably with their foreign contemporaries, though the United States forged ahead with respect to endurance and the introduction of dual-purpose weapons. It was not till large-scale rearmament was clearly imperative that the full effects of the lean years were felt. It was then found that the starved industries could not cope adequately with either the number of ships required or the more complex equipment now demanded. Six years of war, even if the 'Hunts' are included, produced only about three-quarters the number of destroyers of 1914–18, and the comparison between their armament and that of their opposite numbers in the U.S. Navy was a mortification to many. D.N.C. and D.N.O cannot be fairly held responsible for what was mainly due to a national neglect of defence. What was achieved by the destroyers needs no apology.

Obviously, the number of ships concerned does not permit Captain Manning to offer at a price within the scope of most readers anything like the detail of Dr Parkes's monumental treatise on British battleships. He gives, however, in addition to introductory chapters on such aspects as destroyer names, builders, A/s weapons, and so forth, the most important features of each class, special points of interest about individual destroyers, including date of launch, successes against U-boats and their ultimate fate, where applicable. These, together with his chapter on the allocation of destroyers to flotillas and their disposition, plus the battle honours listed in *British Warship Names*, by the author in collaboration with Cdr. C. F. Walker, provide a general idea of most ships' active life.

In a book consisting so largely of data, accuracy must be considered important. A conscientious though naturally not exhaustive, check suggests that this is of a high standard, especially considering the difficulties, which are greater than might appear at first sight. (For example, Brassey and Jane differ considerably on the displacement of many early destroyers, and the Navy List is liable to vary from year to year, not invariably in the usual direction, of increasing weight with age. Again, such authorities as Jane, 'Taffrail' and the Navy List differ on the classification of the Yarrow destroyers of 1916–17, with the Navy List a poor last for logic.) Four 'Hunts' and one of the *Napier* class (the second *Noble*, transferred to the Netherlands as the *Van Galen* and never in British Service) seem to have slipped through the mesh and one of an inconsiderable number of misprints advances the date of Vicker's merger with Armstrong by 20 years. Of rather more importance is an omission to note the change from 'Navy List' to 'standard' displacement, made by Jane in 1930 and the Navy List in June 1931, following the London Treaty of 1930 which restricted both the individual displacement and the total tonnage permitted, on a 'standard' basis. In consequence, the first five 'V' Class of 1917 (the *Valhalla*, *Vampire* etc., known variously as 'V' leaders, or half-leaders, before being reduced to the ranks) are made to appear more than 200 tons heavier than the rest of the class, instead of a mere 25 tons, the Admiralty 'S' Class of 1918 look smaller than the preceding 'R' Class, instead of 5 tons heavier, and the size of later destroyers is similarly scaled down. Otherwise, the figures and facts look very reliable.

It should be evident that the book has given this reviewer hours of interest and enjoyment. The photographs alone repay careful study and are well worth the price. The work has clearly been a labour of love and should be widely appreciated.

P. W. BROCK

PAINTED PORTS. THE STORY OF THE SHIPS OF DAVITT AND MOORE. By CAPTAIN A. G. COURSE. London: Hollis and Carter. 1961. 9 × 5½ *inches*; 230 *pages*; 23 *illustrations*; *Index*. Price 21*s*.

During the second half of the nineteenth century and indeed well into the twentieth, there was no more familiar sight in every major port on the Australian run than the black and white painted ports of Devitt and Moore's fine sailing ships. Long after the P. & O. and the Orient, and other steamship lines had provided most luxurious travel accommodation for passengers to and from the Island Continent, people vied for a berth in such ships as the *Sobraon*, *Macquarrie* and *Illawara*; and that went on till the beginning of World War I.

When this reviewer was a lieutenant on the Australian station at the turn of the century, he well remembers those fine ships, the *Macquarie* and *Illawara*, coming out to Sydney every year with a company of happy and contented passengers many of whom declared that they were sorry the voyage was over. These ships also carried twelve or fourteen so-called midshipmen, and eight or ten apprentices, the difference being that the midshipmen paid a heavy premium, and only signed on for one voyage (and they messed like gentlemen in their own deck-house) whereas the apprentices paid very much less, signed articles for four years, and generally worked, and pigged it, like the foremast men.

These midshipmen, who all joined under Lord Brassey's Scheme for training merchant service officers, were known as 'schemers', and more commonly throughout the Merchant Service as the 'Bloody Schemers'. As may be imagined the 'Schemers' were regarded as mere amateurs by the real apprentices, and they were indeed sometimes eyed with a degree of suspicion by hard old shell-back Board of Trade examiners, when they presented themselves for examination for second mate.

I do not think there was as much demand for passages in sailing ships on the homeward run as on the outward. Sailing dates could not be fixed with the same certainty. Ships often had to wait several months, or even a year, for their cargo of wool for European ports.

Captain Course, author of *Deep Sea Tramp*, and who has himself served in sail, traces the history of the Devitt and Moore Company from its beginning in 1836, as the venture of two go-ahead shipping clerks, up to the present day, when the tradition of seamanship, sea discipline and training which made the names of Devitt and Moore so famous, is still continued in the Pangbourne Nautical College.

It is true that the cadets at this beautiful and well-run college by the Thames can no longer enjoy the advantages of actual sail training at sea; but one can say without hesitation that for smartness, and all those qualities which go to make a good sea officer and a gentleman, Pangbourne stands very high indeed. Many of our famous public schools might do well to take a leaf out of its book. There are no slouching round-shouldered beatniks, with a dollymop's shock of dirty untidy hair to be seen around Pangbourne.

But to return to our ships and the sea: it was in 1836, in the reign of William IV, that Thomas Henry Devitt and Joseph Moore, two clerks in the employ of Messrs Buckle and Baxter and Co., decided to leave that firm and to start a business on their own. Later as Devitt and Moore they became ship owners and entered the passenger and cargo trade to Australia. They owned many fine wool clippers and passenger ships (twenty-nine in all) and when passenger sailing ships were being driven from the seas by steamers, they owned and managed sail training ships for cadets on the Sydney and Melbourne runs. These ships also carried passengers and cargo.

On the death of Thomas Devitt in 1860, his son Thomas Lane Devitt took over his late father's partnership, being then under 21 years of age. Yet the business of the firm showed a marked increase. In 1863 Devitt and Moore were registered as owners of the *Vimiera* and *La Hogue*, two of Duncan Dunbar's full rigged ships, and they started their long connexion with Australia.

In 1879 Devitt and Moore joined with F. Green and Co., so well known as owners and managers of the Orient Line of steamers. Thomas Lane Devitt was created a baronet in 1916 for his great service to British shipping and he eventually became known as the Grand Old Man of

the City of London. He was much beloved by his staff and by his employees, and indeed by all who knew him. He died in December 1923.

The *Vimiero* was the first ship to be registered under the ownership of Devitt and Moore. She sailed on her first voyage under Captain G. Green. She was a full rigged ship of 967 tons of the Blackwall frigate type, built in 1851 at Sunderland by James Laing. She was built of teak wood, and with her painted ports she looked at a distance the perfect man-of-war frigate. She had excellent passenger accommodation and food and service were first class, something not be found in most passenger ships of the time. The *Vimiera* was sold in 1872.

The *La Hogue* built in 1855 was the largest ship to be built in Sunderland. Her gross tonnage was 1478 New Measurement. Her frames were of best English oak, planking of East Indian teak. Her timbers were pickled in salt, probably against the Teredo worm. She was sheathed with copper below the water line. Her frames were trussed with iron bars. She was claimed to be the first ship built with inside and outside iron trussing. Her poop was 96 feet long and the saloon extended the full length of the poop. The eighteen state rooms had square ports and every one had its own W.C., something hardly to be found in most passenger steamers 100 years later!

La Hogue was sold in 1886 and became a timber drogher.

The *City of Adelaide* built in 1864 deserves a special mention for she is said to be still afloat, as H.M.S. *Carrick*, and as a club for R.N.R. officers in Scotland. Five years older than the *Cutty Sark*, her original hull and frames are still in sound condition. She is composite built, with iron frames and teak hull sheathed with copper. In the 1870's iron ships were built in increasing numbers and composite construction died out.

The *City of Adelaide* was quite a small ship, 791 tons gross. She was full rigged and carried besides cargo, first and second-class passengers and emigrants. In 1867 she sailed from London to Adelaide in 65 days; this was a record until beaten by the *Torrens*.

In 1872 she sailed home round the Horn in 140 days and was actually becalmed off Cape Horn. This reviewer had an exactly similar experience in *Viking* in 1934, being becalmed off the Horn, and taking 140 days to sail from Spencer's Gulf to Falmouth.

In 1889 the *City of Adelaide* was sold to Belfast, and in 1923 was bought by the Admiralty for £2500, renamed H.M.S. *Carrick*, and converted into a drill ship for the Clyde R.N.V.R.

The *Chaa-Sze* was the only tea clipper ever owned by Devitt and Moore. They brought her in 1868 and kept her for 6 years. A teak-built ship, her registered tonnage was 550. Her beams and frames were 4–6 feet apart, wider than usual—and to compensate for the loss of strength, three thicknesses of planking were used in the construction of her hull. On the inside two thicknesses were set diagonally, crossing at right angles, and the third ran fore and aft, horizontally, on the outside. This very unusual construction may perhaps be explained by the fact that she had originally been intended for a steam whaler!

It would be impossible in the course of a review to describe all the beautiful ships that Devitt and Moore owned and sailed during more than half a century; but some mention must be made of the wonderful *Sobraon*. She was the largest composite ship ever built and so stout was her construction that when she was broken up in Sydney in 1941 after 75 years afloat, her iron beams and frames, and teak wood planking were found in excellent condition; in fact some of her timber was used for building the yacht *Sobroan* which I believe is still afloat. *Sobraon* was built in 1866 by A. Hall and Co. of Aberdeen, registered tonnage 2130 and dead weight 3500 tons. Built for a China clipper, she never went to China. Devitt and Moore chartered her and put her on to the Melbourne run, where she remained for the rest of her sea-going career. One of the fastest sailing ships of her time, she was also the most comfortable in bad weather. As Captain Course says, 'on what ship could one play cricket on deck while running the Easting down? I only know of one—the *Sobraon*.'

The *Sobraon* was commanded by Captain J. A. Elmslie for no less than 22 years. When he took over in 1867 his crew consisted of four mates, surgeon, eight apprentices, carpenter, sailmaker, boatswain, two boatswains' mates, a donkey man, chief steward, chief cook, butcher and butcher's mate, twelve cooks and stewards, two stewardesses, twenty-six able seamen, four ordinary seamen and two boys, and there was such competition to serve on board that it is not surprising that men spent

many consecutive years in her. James Cameron the carpenter was in her for 25 years. Captain A. G. Elmslie, the captain's son, sailed under his father for eleven years, from apprentice to Chief Officer, and there were many similar cases of long service in the ship.

A curious hobby was popular among the passengers in *Sobraon* and in some of the other Devitt and Moore ships. It was known as ring making. A hole was made in the centre of a coin and it was impaled on a marling spike, then the outer edge was beaten with a hammer until it was shaped like a ring. Any coin would do, gold, silver or copper.

Food was exceptionally good in *Sobraon*, for she had an ice box with a capacity of 10 tons of ice, and a condensing plant for turning salt water into fresh. How much this cost in fuel is not stated.

As with other large passenger sailing ships, she carried a large and varied live stock including three milch cows, three bullocks, ninety sheep, fifty pigs, and over three hundred head of poultry, including laying hens.

The *Sobraon* always made the homeward passage via the Cape of Good Hope calling at Capetown and at St Helena. Fares were: first-class single £47–£60; second class £19–£26. The *Sobraon* was sold to the N.S. Wales Government for £12,500 and was converted to a Reformatory ship. Then in 1911 she was sold to the Commonwealth Government for £15,000 and renamed H.M.A.S. *Tingara* and became a training ship for boys entering the Royal Australian Navy.

Unfortunately there is no space to deal with all the other more modern sailing ships of Devitt and Moore. The *Medway* was the last of them. Her last Commander was Captain Jackson, with Captain Noakes as Nautical Instructor. There is an excellent photograph of the latter sitting on the poop wearing a heavy waxed moustache like an old time Sergeant-Major, and *buttoned* boots!

A. MACDERMOTT

NORTHWEST BY SEA. By ERNEST S. DODGE. New York: Oxford University Press. $8\frac{1}{2} \times 5\frac{3}{4}$ *inches*; 348 *pages*; *chronological table*; *index*. Price $ 6.50.

Mr Dodge, the Director of the Peabody Museum of Salem, Massachusetts, who contributed such a valuable account of his charge to the *Mariner's Mirror* of May 1961, has written a popular survey of the long-protracted search for a practical Northwest Passage which ended, during the present century, in the voyages of Amundsen's *Gjoa*, Henry Larsen's *St Roch*, and the nuclear exploits of the *Nautilus*. The great virtue of his book is that it is really lively, that it is generous in its outlook, that it is based on sound authorities (which are invariably given), and that it is up to date. Mr Dodge does not entirely eschew speculation, and when he speculates, he often carries the reader with him. For the general public, *Northwest by Sea* is an attractive account of an enormous quest, and even the specialist may find something which is new to him, or which is freshly presented.

O. WARNER

THE JOURNAL OF CHRISTOPHER COLUMBUS. Translated by CECIL JANE, revised and annotated by L. A. VIGNERAS, with an appendix by R. A. SKELTON. London: Anthony Blond and the Orion Press. 1960. 227 *pages*; 90 *illustrations*. Price 45*s*.

All those interested in Columbus and the discovery of America will be glad to have this new and greatly improved version of Cecil Jane's translation of 1930, which has long been out of print. The translator has enhanced its accuracy by checking doubtful readings with the Las Casas transcript of Columbus's Journal, the oldest now extant, which is preserved in the Biblioteca Nacional at Madrid. Being intended for the general reader, the annotation has been kept to the minimum; but it is based on the works of Admirals Julio Guillén, Eliot Morison, and other scholars who have

advanced Columban studies since Jane's day. Format, illustrations, and printing are excellent; and a valuable appendix on the cartography of Columbus's First Voyage has been added by the Superintendent of the Map Room, British Museum. The book inexplicably lacks an index and all page references in the contents list of coloured plates and maps, but otherwise can be regarded as a bargain at the price.

C. R. BOXER

MEDICINE AND THE NAVY. Volume III—1714–1815 by CHRISTOPHER LLOYD and JACK L. S. COULTER. E. and S. Livingstone. 9 × 6½ *inches*; 402 *pages*; *illustrations*; *appendices*; *bibliography*; *index*. Price 50*s*. net.

This is the third volume of a history of medicine, in the naval aspects of the subject, which will span the period 1200–1900. Surgeon-Commander John Keevil, the author of the first two volumes, died before the second was published, and the project is being continued by an historian and a surgeon-captain, a combination which ensures both perspective and scientific awareness. This new volume is a triumph. No one but a doctor has a right to give that opinion on a technical work, but my justification for the statement is that, from the point of view of the student of history, Messrs Lloyd and Coulter have covered the whole of the classical period of the sailing navy, including its principal voyagers, and, in a narrative whose pace never flags, they have made apparent the reasons why mortality was always so much higher from disease than from the enemy, and how disease was countered.

This volume differs in plan from its predecessors. Instead of a chronological approach, the authors have given a series of chapters to special subjects; they have then surveyed 'the medical history of the wars of the eighteenth century', an immense theme in itself. Then there is a section devoted to hospital administration; finally, a consideration of sea diseases, particularly scurvy and fever.

There is even a hero, in the person of James Lind (1716–94), whose career spanned so much of the period of the book, and whose *Treatise of the Scurvy*, which appeared in 1753 based on dietetic experiment, contained the proper answers to scurvy. If it had been made full use of, from the moment it appeared, it would have saved lives and suffering. The authors attribute some of the delay in right treatment to the voyages of Captain Cook. They point out that although the health record of his voyages was good, this was partly for what might be viewed an extraneous reason, and that, so far from advancing the cause of nautical health the great circumnavigator, for reasons for which they do not blame him, actually retarded it. This is only one of several side-lights on great sea officers of the period, and it helps to correct a very general misconception.

In addition to valuable documentation, such as one would expect of the technical side of naval medicine, the authors are particularly full on the personalities in the field. If Lind emerges well, so does his disciple Trotter, with his wholly justified admiration for Howe, and his delightfully readable *Medicina Nautica*, which throws so much light on the men of the Channel Fleet in the opening phase of the war with Revolutionary France. In short, as a specialist study with wide ramifications, this book should be found on the shelf close to our President's *Social History of the Navy, 1793–1815*. It is impossible to understand the battles fought by St Vincent, Duncan and Nelson without realizing the problems these admirals had to encounter before and after they met the enemy: and the problems of medicine and supply were always very close to one another.

One small point on which enlightenment would have been welcome. The authors are full of praise for the way in which Hawke kept his blockaders at sea for so long, and they go into some detail as to his system. It would be good to know more about the benefit which Hawke derived from seizing small islands off the French coast, and growing green-stuff.

OLIVER WARNER

THE CHINA BIRD. By DAVID R. MACGREGOR. Chatto and Windus. 1961. $9\frac{1}{2} \times 6\frac{1}{2}$ *inches*; 366 *pages*. Price 42*s*. net.

A book on sailing vessels by Mr MacGregor will always be of interest to many members of this Society and *The China Bird* is likely to be more so than usual in that it is not only about the sailing ships themselves but also includes a great deal about the business side of running a sailing ship.

This book has been written to celebrate the centenary of the firm of Killick and Martin which commenced business as shipowners in 1861. In 1886 the firm gave up the owning of ships and confined themselves to shipbroking only, and they have recently taken up the chartering of aircraft as well, a far cry from Captain Killick's famous *Challenger*.

It was this ship that showed that British-built and manned vessels could at least hold their own with the much lauded ones of America, and at times were quite capable of beating them too. At the end of 1860 Captain James Killick came ashore and a few months later went into partnership with James Henry Martin; Killick, being the seaman, looked after the firm's ships and Martin, who had been trained in the office of Shaw, Lowther and Maxton, had the necessary office experience. In 1863 a third partner was taken in and the firm became known as Killick, Martin and Co., the third partner being David William Ritchie. As has been pointed out already, in 1886 the Company gave up shipowning; in July of that year they sold their well-known *Wylo* on her return to London from Shanghai. After that, shipbroking became their sole interest. The author must have put in a lot of hard work to produce such a very full book of the activities of the firm of Killick, Martin and Co., and this volume is a valuable addition to the literature which tells us how shipping firms were run in Victorian times and also links up with the changes of the present day when steam and motor vessels have replaced sail entirely and the air is tending to replace the sea. This book is extremely well and interestingly illustrated and it must have taken considerable time and research to find the originals of many of the drawings and photographs reproduced in *The China Bird*.

There are also some very good plans, etc., of various ships, and five excellent appendices concerning the ships owned by the firm. In addition, the book is very well produced with a good index and an attractive dust cover; the end papers give the sailing ship routes to and from the Eastern ports, which greatly helps the reader to understand and realize some of the difficulties that the old sailing ship masters had to overcome. To those interested in the China trade and the ships, both sail, steam and motor, that carried and still carry on that trade and how they are managed, this book can be thoroughly recommended.

H. O. HILL

SAILS OF THE MARITIMES. THE STORY OF THE THREE- AND FOUR-MASTED CARGO SCHOONERS OF ATLANTIC CANADA AND NEWFOUNDLAND 1859–1929. By JOHN P. PARKER, M.B.E., Master Mariner. The Maritime Museum of Canada, Halifax, Nova Scotia. $10\frac{1}{4} \times 7\frac{1}{2}$ *inches*. 225 *pages*; *index*; *many illustrations and plans*. Distributor in U.K. Francis Edwards.

This is a book which needed writing, and writing now; a few years hence and it might have been too late.

Captain Parker is deserving of the thanks and of the congratulations of all the seafaring people of the Maritime provinces, and indeed of everyone who takes any interest in the many beautiful schooners built in Nova Scotia, New Brunswick and Newfoundland between the years 1859 and 1929.

All these ships, of which the Author writes, are the direct descendants of the small two-masted schooners many of which, of the same type, are still sailing round the coast today. These small two-masted vessels however, are, and were, very limited as to size, the limitation being imposed by

the size of the mainsail, and the difficulty of handling a large one with a very small crew of three or four hands.

This limitation did not apply to the big two-masted banking schooners carrying crews of thirty men or more to man their doreys.

In my time, up to the 1914 war, many of the schooners carrying salt codfish from Newfoundland to Portugal, and even as far as Italy and Greece, returning with a cargo of salt, were tiny vessels of no more than 50 tons, with a crew of four or five men, sailed by a master without a certificate of any kind, and with but the most elementary knowledge of navigation.

It can hardly be a matter of wonder that scores of such small craft, ay, and bigger ones too, were lost or abandoned at sea year after year.

One may well ask why the government of the country permitted such vessels to sail on long ocean voyages without a competent master.

The answer was given to me by the shipping master at St John's: 'There *are* no certificated masters,' said he, 'but you cannot stop the whole trade of the country for that reason.'

My next question, put to the official teacher of Navigation was: 'Why are there no certificated masters?'

His answer was: 'Captain, you can't teach a man Navigation if he doesn't know the multiplication table, and can hardly write his own name.' At that time, 1914, more than half the population of Newfoundland was illiterate.

But to return to the subject of this book: It is the story of the development of the large cargo schooners of three or four masts, called 'Terns', for want of a better name, built in Atlantic Canada and in Newfoundalnd during eighty-odd years, the whole period of the existence of the type. The fore and aft rig, which enabled all the sails to be set and furled from the deck, was obviously far more economical in manpower and in gear than the square-rigged ship, and for that reason alone supplanted the many brigs, brigantines, and barques of the first half of the nineteenth century and later.

These big Tern schooners were mostly built before the early 1920's and the last of them disappeared just after World War II, say in 1950.

In their time these fine ships of 250 to 400 tons were a beautiful and a familiar sight in all the ports of the North and South Atlantic, and indeed in many European harbours as well: till they ended their days, alas, only too often, as 'Marine Casualties', either on the open sea, or on some deserted shore.

They will remain in the memory of those who knew them, as the white graceful ships of days that are gone.

The author's qualifications for writing this book are many and varied. After seeing the 1914–18 war through on land, he worked his way from ordinary seaman to certificated mate in tankers, and then, having obtained some financial backing from members of his family, he became the owner of the three-masted schooner *St Clair Theriault.*

He had no experience whatever of sailing or navigating a ship under sail, and still less of handling the business side of his venture: but he was evidently one of those courageous and adventurous types who will try anything once. It is true he had sailed in some small yachts for pastime, so one may suppose he knew a little of the technique of sailing, and of course he must have had a fair knowledge of navigation to have passed his mate's examination; and even in a steamer an A.B. is supposed to know something of the uses of a marlin spike and a palm and needle (many of them do not).

The account of Captain Parker's first heart-breaking voyage in the *St Clair Theriault* makes exciting and interesting reading; indeed for myself I found it as hard to put down as any work of fiction. As for the unfortunate owner of the vessel himself—well, he must be a man of outstanding courage and determination to take all those shattering clouts on the chin and come back for more. If ever a man learned the whole art and mystery of being a shipmaster the *hard* way, he did.

The *Theriault* was eventually abandoned in a sinking condition, 80 miles west of Ushant. Her owner and her crew were all taken off by the New Zealand Shipping Co's steamer *Hertford* and landed at Hull.

This, it may be said, was the end of eighty per cent of the ocean-going sailing vessels of the Maritimes. That crews were ever found to man these ships, or companies to insure them, will always remain a mystery to some of us.

To many readers of this book it may seem that practically all these ships came to a violent end. The phrases 'Abandoned in the Atlantic', and 'The crew taken off by a passing steamer', occur with monotonous frequency in the registers. Others were lost through the hazards of navigation while sailing along a dangerous coast in fog, snow, and heavy gales. Very few of this once great fleet ended their days rotting on a beach.

In the older, European countries, England, Wales and Scotland, shipwrights took more time and used better materials to build their vessels. English oak, selected planking, and solid fastenings were their answer to the ravages of time, and to the strains set up in a seaway. While in Canada and Newfoundland, ships were built of soft woods; the stem, stern-post and keel were usually of oak or birch; but the timbers, beams and planking of spruce or fir. In addition they were built hurriedly, and by men who were not really trained shipwrights. Any fisherman who could handle a hammer and saw considered himself qualified to build a schooner.

Once put into service the majority of these ships were overloaded, especially when carrying salt in bulk—a bad cargo—and were badly strained.

There were no load line requirements for this class of vessel, and they were often loaded, through sheer ignorance, till the sheer strake amidships was in the water.

In Newfoundland ships the pumps more often than not were home-made wooden affairs and frequently defective. Where there was no power pump, the crews often spent many hours a day trying to keep a leaky vessel afloat, and when the poor devils broke down from fatigue, and the water kept gaining on them all the time, there was nothing for it but to hoist the ensign upside down in the rigging and hope that a steamer would come along before she sank.

As said before the masters of most of these vessels had no certificate of competency, and their knowledge of navigation was very rudimentary. It was their custom to sail on D.R. towards their destination for as long as possible; then get a meridian altitude of the sun for latitude, and when they were more or less on the latitude of their port of discharge they just kept her sailing due east or west as the case might be till they sighted land.

They sailed their ocean traverses in fact in a fashion that had changed but little from that of Columbus and Cabot four centuries before.

Of course when they sighted a steamer no opportunity was lost of speaking her and asking for position.

Walter Monroe used to tell of an occasion when he was returning to Newfoundland from England in a mail steamer, when they passed close to one of his own schooners also homeward bound. He was telling the other passengers of the courage and hardiness of these Newfoundlanders, and the skill with which they found their way about the oceans almost as it were by instinct. And then a hail came from the schooner, 'Hey mister! where we at now?'—They hadn't a clue!

Walter said he was never so shamed in his life!

It may be noted that Newfoundlanders never say 'Where are we?' but always, 'Where we at?' or 'Where we to?' Should you ask 'Where is so and so?' you may get the answer, 'I dunno where he's at'.

Captain Parker lists some 900 of these Canadian and Newfoundland 'Tern' schooners. One would have liked to write more of individual ships one has known, but space does not permit.

A. MACDERMOTT

ACTIVITIES OF OTHER SOCIETIES

MARITIME INSTITUTE OF IRELAND MUSEUM

The 1961 exhibition at the Maritime Institute of Ireland's Irish Maritime Museum, St Michael's Wharf, Dún Laoghaire, Co. Dublin, was opened by Mr Kevin Boland, T.D., Minister for Defence, 17 June.

There are 88 items on exhibition, varying from a collection of prints by Thomas Dutton of mid-nineteenth-century ships and barques to some excellent scrimshaw work by an old Arklow seaman, Tom Colley, on a tea-chest, representing sea scenes and the well known Arklow schooners *Mary B. Mitchell* and *Venturer*.

Most of the exhibits in the main exhibition hall are on loan from the Irish Naval Service. They include two models of Haulbowline Dockyard, a model of one of the torpedo boats which formed the nucleus of the country's coast defence force during the 1939–45 war, a model of the Naval Service corvette L.E. *Macha*, a torpedo, mine and depth charge, and a series of photographs of the Naval Service at work. Along with these are the builder's model of the celebrated Irish Fishery protection vessel *Helga*, which became H.M.S. *Helga* in the 1914 war, was used to help suppress the 1916 Rising in Dublin, became the Irish fishery protection cruiser *Muirchu* after the Anglo-Irish treaty, and in 1940 the Irish naval service gunboat L.E. *Muirchu*. There are also the special flags designed for the *Helga* for her original duties, and a photograph of her as H.M.S. *Helga*. The commission of Robert Halpin of Wicklow, the famous master of the *Great Eastern*, as Commander R.N.R., old prints of the *Victory*, *Warrior*, *Duke of Wellington*, *Victoria and Albert*, *Captain* and other nineteenth-century British naval vessels, part of Bligh's chart of Dublin Bay of 1800, a fine 2-foot model of a British 1914 naval pinnace, pictures and documents concerning the *Vasa*, and the Arsenal at Venice, a collection of stamps showing warships, and a model of the *Golden Hind*, make up most of the rest of the naval section.

Also in the main hall are models of hookers, currachs and other typical Irish inshore fishing vessels of the early twentieth century.

In an annexe devoted to the lifeboat service the most admired exhibits are the service boards of the Poolbeg Lifeboat Station, recently closed after nearly 140 years, and the name plate of the Boston built S.V. *Palme*, wrecked in Dublin Bay on Christmas Eve 1895 when in Finnish ownership: on this occasion the entire crew of the Dún Laoghaire lifeboat, 15 men, was lost in the rescue attempt.

In the entrance hall is a series of photographs and prints of old Dún Laoghaire and the famous City of Dublin Steam Packet Company's paddle mailboats; also Robert Halpin's 7-foot model of the *Great Eastern* as a cable layer, and his R.N.R. uniform.

Among exhibits on view in the library are specimens of cable laid by the *Great Eastern*, part of her log, Halpin's papers, the three volumes of Scott Russell's ship plans of 1864 and two volumes of MacKenzie's charts of the Bristol Channel, Irish Sea and Hebrides of 1775–76, relics from the emigrant ship *William Tayleur* wrecked off Lambay, Co. Dublin, in 1854, and of the Holyhead mailboat *Leinster* torpedoed in 1918, as well as photographs of H.M.S. *Melampus*, H.M.S. *Skipjack*, King George V's yacht *Britannia*, and other well known ships in Dún Laoghaire, and pictures and a model of Robert Halpin's first command, the Belfast built Galway Line (Atlantic Royal Mail Line) *Circassian*.

J. E. DE COURCY IRELAND

CORRECTION TO VOLUME 47

P. 176. The lengths of the various sweeps are expressed as proportions of the beam of the vessel. The abbreviation 'ft.' following the figures should be deleted throughout.

SALE OF BACK NUMBERS

The Mariner's Mirror was published monthly from January 1911 to September 1914 and from July 1919 to December 1923. Since then it has appeared quarterly. Single copies of the monthly issues Vols. 1 to 9 will be supplied, if available, at 7*s.* 6*d.* each or 5*s.* to Members, and the quarterly issues, Vols. 10 onwards, at 15*s.* each or 12*s.* 6*d.* to Members (postage 6*d.*). Indexes will be supplied free to purchasers of complete volumes or separately at 2*s.* each.

Orders for Volumes 1 to 9 should be sent to the National Maritime Museum, London, S.E. 10 and for Volumes 10 onwards to the Cambridge University Press, 200 Euston Road, London, N.W. 1.

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NATIONAL MARITIME MUSEUM

CHRISTMAS CARD, 1961

The National Maritime Museum's Christmas Card for 1961 is to be a reproduction of a painting of the *Triton* frigate. The original is a small oil painting in the Greenwich Hospital Collection which was painted by Nicholas Pocock in 1797.

The *Triton* had in the previous year assisted in the capture of two Spanish frigates carrying treasure to the value of £600,000.

Nicholas Pocock, 1741–1821, who had served as a merchant captain and a master R.N., was the best English marine painter of his generation.

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